The Housing Need of Indigenous Australians, 1991

Roger Jones

Research Monograph No. 8

The research on which this monograph is based was commissioned and wholly funded by the Aboriginal and Torres Strait Islander Commission (ATSIC). This monograph supplements the report of Stage 1 of the 1992 ATSIC National Housing and Community Infrastructure Needs Survey which examined housing and community infrastructure need in rural and remote communities and was an initiative of the National Aboriginal Health Strategy. Together these two documents provide a comprehensive overview of the housing need of indigenous Australians.

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Foreword

Since 1992 the Centre for Aboriginal Economic Policy Research (CAEPR) and in particular CAEPR Fellow Dr John Taylor have had a close association with the Aboriginal and Torres Strait Islander Commission's (ATSIC) Housing and Community Infrastructure Needs Survey. It was Dr Taylor's consultancy report 'Survey or Census?: Estimation of Aboriginal and Torres Strait Housing Need in Large Urban Areas' (published as CAEPR Discussion Paper No. 28, September 1992) that alerted Australian Construction Services (ACS) and ATSIC that any attempt to assess the housing need of indigenous Australians in urban Australia by primary data collection would be prohibitively expensive and fraught with methodological problems. Consequently, ATSIC decided in accordance with Dr Taylor's recommendation that 1991 Census data was sufficiently detailed to allow for the assessment of housing need. The decision on measures came later.

Dr Roger Jones, Head, Social Science Data Archives, Research School of Social Sciences, the Australian National University and Dr Michael Adena from INTSTAT Australia Pty Ltd, a Canberra-based consulting firm, were awarded the contract to undertake this work. With time, their brief expanded somewhat. In 1992, ACS had completed Phase 1 of the 1992 ATSIC Housing and Community Infrastructure Needs Survey which focused primarily on discrete Aboriginal communities in rural and remote areas. Phase 2 was to examine indigenous Australian housing need in urban and metropolitan areas. However, as 1991 Census data were not available early in 1993 when Drs Jones and Adena began their consultancy, it was initially decided to assess housing need for all Australia, disaggregated to sixty ATSIC regions, using 1986 Census data. Subsequently, late in 1993 and early in 1994, 1991 Census data became available; during 1993, the number of ATSIC regional councils was reduced to 36.

This monograph presents a revised version of the Jones and Adena consultancy report to ATSIC 'Aboriginal and Torres Strait Housing Needs Assessment Project, Stage 2: Analyses of 1991 Census Data'. It was revised by Dr Jones during October and November 1994 while he was a visiting fellow at CAEPR. One of CAEPR's many research objectives is to examine the interrelationships between environmental health and economic status, and vice versa. This monograph makes an important contribution to this issue by highlighting the relative housing need of indigenous Australians, in a very rigorous and quantitative manner, against normative criteria. This is not to suggest that the housing requirements of indigenous Australians are qualitatively identical to those of other Australians. It is obvious to most who work in Aboriginal and Torres Strait Islander affairs that the

cultural and environmental diversity in which indigenous Australians live will have a marked impact on the nature of housing need. Nevertheless, policymakers need a baseline from which to assess both the global extent of need, in both housing unit and dollar terms, and ATSIC requires some basis to make decisions about regional variations in housing need as a guide to resource allocation. Quantified variations in housing need, by State and Territory, will also be of strategic significance in any bilateral funding agreements made between ATSIC and the States and Territories in order to meet housing shortfalls.

This monograph is potentially an extraordinarily important policy document. It provides, for the first time, truly national estimates of the housing need of indigenous Australians. It also provides an indication of relative need, according to widely accepted normative criteria, compared to the non-indigenous population, as well as a measure of change over time between 1986 and 1991 with intercensal analysis. It will be an essential document for all policy makers and program managers in the housing arena at Commonwealth, State and Territory, regional and local levels.

CAEPR research production staff working as always to a tight deadline assisted enormously by ensuring that design and production of the monograph was to the highest standard. The team headed by Krystyna Szokalski included Linda Roach, Hilary Bek, Belinda Lim and Nicky Lumb. Finally, I would like to thank Roger Jones for his willingness to continue his work in this area to ensure that his joint consultancy report was converted into a monograph that will be more accessable to both policy makers and researchers. All too often consultancy reports are not widely disseminated; it is my hope that by using the CAEPR research monograph series this research will become accessable to a wide readership and ultimately that it will play a significant role in enhancing an understanding of the extent of the housing backlog of indigenous Australians and in the development of policies and programs to ameliorate relative disadvantage.

Jon Altman
Director, CAEPR

December 1994

Acknowledgments

A number of people have contributed to the research on which this monograph is based, no one more so than Michael Adena of INTSTAT Australia Pty Ltd, my co-consultant on the project, who programmed and coordinated with the Australian Bureau of Statistics (ABS) the analyses of the 1986 and 1991 Census data which are such an essential part of this study.

I am grateful to the members of the project Steering Committee for their advice and patience throughout the conduct of this project. I am particularly indebted to John Taylor for his constructive comments on the earlier drafts of the report and his continuing interest and advice throughout the project, and to Peter Gulliver, whose management of the project was always helpful and supportive.

Terry Burke and John Pidgeon from the Centre for Urban and Social Research, Swinburne University of Technology prepared a comprehensive assessment of housing need indicators which is the basis for much of Chapter 1 and their permission to include parts of this material is gratefully acknowledged. Professor Max Neutze also provided valuable advice on the usefulness of housing need measures.

The data used in this study were derived primarily from the 1986 and 1991 Censuses by the Statistical Consultancy section of the ABS, and I am very grateful for the support provided by Gemma Van Halderan and Damian Collins in particular. Ron Hall, of the Business Surveys section of the ABS, provided access to the data from 1992 ATSIC Housing and Community Infrastructure Needs Survey.

My thanks to CAEPR staff for the many valuable suggestions for revisions to the original consultancy report, for editing, layout and proofreading, and for the opportunity to present the results of this research to a wider audience through their publications program.

All analyses and interpretations of these data in this monograph are, however, entirely the responsibility of the author.

Roger Jones
CAEPR

December 1994

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Abbreviations and acronyms

ABS	Australian Bureau of Statistics
ACS	Australian Construction Services
AHPL	After-housing poverty line
ATSIC	Aboriginal and Torres Strait Islander Commission
NAHS	National Aboriginal Health Strategy
NHS	National Housing Strategy
SLA	Statistical Local Area

ATSIC regional council names

The ATSIC regional council names used throughout this report are those that were commonly used when the 36 regions were established. The list below cross-references these names with those now used by ATSIC.

Current regional council name	Previous name
Sydney	Sydney
South Eastern NSW Indigenous	Queanbeyan
Binaal Billa	Wagga Wagga
North Eastern NSW Indigenous	Coffs Harbour
Kamilaroi	Tamworth
Murdi Paaki	Bourke
Binjirru	Wangaratta
Tumbukka	Ballarat
South Eastern Queensland Indigenous	Brisbane
Central Queensland	Rockhampton
Goolburri	Roma
Townsville	Townsville
Cairns and District	Cairns
Mount Isa and Gulf	Mount Isa
Torres Strait Regional Authority	Torres Strait
Peninsula	Cooktown
Patpa Warra Yunti	Adelaide
Wangka-Wilurrara	Ceduna
Nulla Wimila Kutju	Port Augusta
Karlkarniny	Perth
Kaata-Wangkinyiny	Narrogin
Yamatji	Geraldton
Wongatha	Kalgoorlie
Ngarda-Ngarli-Yarndu	South Hedland
Kullarri	Broome
Derby	Derby
Wunan	Kununurra
Western Desert	Warburton
Tasmanian Regional Aboriginal	Hobart
Yilli Rreung	Darwin
Alice Springs	Alice Springs
Garak-Jarru	Katherine
Yapakurlangu	Tennant Creek
Jabiru	Jabiru
Papunya	Apatula
Miwatj	Nhulunbuy

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Introduction

The lack of adequate services and facilities in rural and remote Aboriginal and Torres Strait Islander communities has rightly received a great deal of attention in recent years and, while marked improvements have been made, housing and infrastructure developments still fall far short of the standards experienced by other Australians. A major initiative of the implementation of the National Aboriginal Health Strategy (NAHS) was a national Housing and Community Infrastructure Needs Survey undertaken in April-May 1992 to collect information on the housing need and, more particularly, the infrastructure needs of urban, rural and remote Aboriginal and Torres Strait Islander communities with indigenous populations of 1,000 persons or less. This survey represents Stage 1 of the Aboriginal and Torres Strait Islander Commission (ATSIC) Housing and Community Infrastructure Needs Assessment Project, 1992.

However, the majority of Aboriginal and Torres Strait Islander people, almost 70 per cent, live in urban centres and more than one-quarter live in the major urban and metropolitan areas (Gaminiratne 1993). Evidence presented to the recently completed Inquiry into the Needs of Urban Dwelling Aboriginal and Torres Strait Islander People, conducted over two years from mid-1990 to mid-1992, strongly emphasised the disadvantaged in housing of urban Aboriginal and Torres Strait Islander people: 'the lack of housing, overcrowding and poor standard of housing were problems raised at virtually every place the Committee visited'. Many of the factors identified as contributing to this disadvantage are those commonly associated with poverty: lower income relative to that of other Australians; higher proportions of private renters, social security recipients and single income households; unemployment levels at least five times higher than the national average; educational disadvantage; a younger population, higher population growth and higher rates of household formation. Compounding these socioeconomic disadvantages has been a failure to reduce the backlog of housing need as funding allocated for Aboriginal housing has resulted in unsuitable housing, often poorly constructed and inadequately maintained (House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs 1992: 123-8). Stage 2 of the ATSIC Housing and Community Infrastructure Needs Assessment Project aimed to provide comprehensive, up-to-date data on the housing need of this urban indigenous population.

For the Stage 1 survey of rural and remote communities, data were collected through consultations with reference groups formed at each locality. An assessment of the options for Stage 2 concluded that this approach would not be appropriate since:

> it is doubtful that reference groups could be established in all major urban and metropolitan centres in a manner that fully represents the target population.

> Despite some obvious concentrations, a good proportion of Aboriginal and, particularly, Torres Strait Islander households are widely dispersed throughout the suburbs of large cities and there is considerable potential for 'outliers' to be missed. Given that multiple reference groups would be required in the larger centres, there is also potential for overlap in representation and subsequent inaccuracy (Taylor 1992: 13).

While a survey of Aboriginal and Torres Strait Islander families in private dwellings was considered an option, the dispersion of indigenous households throughout the urban areas raised considerable difficulties in the selection of a representative sample and increased the costs, in terms of both time and money, that would be expended in obtaining reliable and valid data. Such a survey could yield more information than is available from the Census of Population and Housing, but a survey would be less comprehensive than the census in its coverage of Aboriginal and Torres Strait Islander households and, thus, less accurate. The review therefore recommended that the Stage 2 assessment of housing need in major urban areas should be made using census-based normative indicators supported by qualitative input from local organisations (Taylor 1992, 1993a).

This report arises out of that recommendation. The brief for this study specified that analyses be undertaken of the Census of Population and Housing to estimate the level of outstanding need for Aboriginal and Torres Strait Islander housing in metropolitan and major urban areas in Australia. This analysis should identify the client groups, their characteristics, location and type of housing required, be comparative between indigenous people and the Australian population, and also provide comparisons between the 1986 and the 1991 Censuses.

Although the study's initial focus was on the identification of housing need in the major provincial towns and metropolitan centres, the analyses in this report are not restricted to those areas. With the agreement of the project Steering Committee, the sole focus on areas not covered by the Stage 1 survey has been dropped in favour of analyses which examine variations between States and Territories, between metropolitan, urban and rural areas within States and Territories, and between the recently defined 36 ATSIC regional councils, most of which include both Stage 1 and Stage 2 areas. Rather than attempting to combine estimates of housing need from the 1992 Housing and Community Infrastructure Needs Survey for smaller urban, rural and remote communities with those for larger urban centres derived from the census, a single, consistent approach is taken across all areas.

An assessment of housing need indicators derivable from the census, undertaken in association with the Swinburne Centre for Urban and Social Research, Melbourne, is presented in Chapter 1. This identified measures which embrace two components of housing disadvantage; housing adequacy, assessed by the amount of overcrowding in private dwellings and the extent of other forms of inadequate housing; and financial housing stress measures of affordability, based on a ratio of housing costs to

household income proposed by the National Housing Strategy (NHS), and after-housing poverty, which compares household disposable income after housing expenditure with a benchmark based on the Henderson Poverty Lines. In the light of recent criticisms of the NHS affordability measure, however, the analyses of financial housing stress in this report use only the after-housing poverty measure.

Chapter 2 examines the results of analyses undertaken using 1991 Census data to assess the level of overcrowding in Aboriginal and Torres Strait Islander households, and the association between overcrowding, household composition and tenure. Variations between and within States and Territories are also examined. The analyses are extended in Chapter 3 to examine financial housing stress and the association between the financial situation of households and overcrowding.

Chapter 4 provides comparisons, based on the 1991 Census, between the housing situation of Aboriginal and Torres Strait Islander people and the non-indigenous Australian population, again taking tenure, household composition and regional variation into account. Changes in the assessed levels of overcrowding and after-housing poverty of Aboriginal and Torres Strait Islander households between the 1986 and 1991 Censuses are examined in Chapter 5. Results from the 1992 Housing and Community Infrastructure Needs Survey relating to overcrowding and housing need in communities with indigenous populations of 1,000 persons or less are compared to 1991 Census estimates in Chapter 6.

1. Housing indicators for Aboriginal and Torres Strait Islander housing need analysis

This study required an assessment of housing need indicators and the development of a practical definition of housing need using census-based normative indicators that is appropriate for Aboriginal and Torres Strait Islander people. The assessment was undertaken by the Swinburne Centre for Urban and Social Research, Melbourne. Their report provides a framework for an Aboriginal and Torres Strait Islander housing need analysis using the data collected in the Census of Population and Housing, and is the basis for the indicators of housing need used in this study (Burke and Pidgeon 1993). Much of the material presented in this chapter, including the tables, is taken verbatim from that report, and the permission of the authors to include this material is gratefully acknowledged.

The framework allows for the identification of the degree and spatial distribution of housing disadvantage using measures which embrace two components of housing disadvantage: housing adequacy, assessed by the amount of overcrowding in private dwellings and the extent of other forms of inadequate housing; and financial housing stress measures of affordability, based on the ratio of housing costs to household income, and after-housing poverty, which compares household disposable income after housing expenditure with a benchmark based on the Henderson Poverty Lines.

In developing this framework, considerable thought was given to the issue of culturally-specific housing need. Not to develop need criteria which are specific to Aboriginal and Torres Strait Islander people risks the charge of cultural insensitivity. On the other hand, using criteria which depart from the standards of the wider society risks marginalising and stigmatising indigenous people. This is exemplified, for example, in measures of overcrowding which attempt to accommodate the extended family through a higher than conventional standard of occupancy, thereby understating the degree of need and perhaps reinforcing negative attitudes towards Aboriginal and Torres Strait Islander people.

There are a diverse range of measures that could be used in an attempt to identify and quantify the level of housing need in the population. No one measure can be considered 'the measure' of housing need, and each has its limitations. As the Australian Institute of Health and Welfare notes in their recent examination of housing need:

> Determining the population in housing need is a complex task, one beset with a range of definitional and conceptual difficulties. There is a continuing debate about what constitutes housing need; how to define homelessness and other aspects of housing need; what the appropriate indicators of housing need are; how indicators should be constructed and where benchmarks should be set. There is also debate about the relative significance of indicators of housing need (Australian Institute of Health and Welfare 1993: 56).

The measures discussed here are limited by the fact that existing secondary data records, notably census data, do not include all the variables necessary for a more complete analysis of Aboriginal and Torres Strait Islander housing need. These problems are reviewed in some detail in Taylor (1992, 1993a) where it is concluded that, while richer data could be collected from a purpose designed survey, a need for statistical reliability and accuracy along with cost-effectiveness requirements dictate a dependence on census data. Any global estimates of housing need, either census or survey based, are likely to be only minimum estimates due to some unknown level of underenumeration. Nevertheless, there seems little doubt that assessments based on the census can meet the basic requirement for credible estimates which would withstand scrutiny in intergovernmental budget negotiations.

Housing adequacy (overcrowding)

Housing adequacy typically embraces measures of housing quality which include the adequacy of structure, the availability of facilities such as bathrooms and inside toilets, and the degree to which a dwelling is overcrowded. A measure of overcrowding is all that can now be identified from Australian census data, and even then the data are limited to an assessment based solely on the number of bedrooms in the dwelling.

Evidence presented to the Inquiry into the Needs of Urban Dwelling Aboriginal and Torres Strait Islander People indicated that overcrowding was a wide-ranging problem due, in most cases, to homeless families and individuals being accommodated by those with housing, usually rented housing. The situation of being homeless arose because of a lack of sufficient income to rent privately, a reluctance on the part of some landlords to rent to indigenous people, and a shortfall in public housing which resulted in extended waiting periods. The overcrowding could then result in the tenancy being jeopardised, demands for higher rent, or those seeking access to public housing being taken off the waiting list or being given lower priority (House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs 1992: 135-6).

Determining a measure of overcrowding is difficult, in part because there is no agreed standard as to what represents overcrowding, and also because Aboriginal and Torres Strait Islander people may have different concepts of personal space and the use of space to those of the general Australian population.

> Aboriginal and Torres Strait Islander people's ideas of how living space should be arranged and used are different in many cases from those of non-Aboriginal people. In many instances, housing provided for Aboriginal families has not been related to lifestyle needs, such as mobility, outdoor living, kinship obligations and the lack of emphasis on personal possessions (House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs 1992: 128).

Nevertheless, to accurately determine preferences for the use of space would require a preference survey for different population groups, including Aboriginal and Torres Strait Islander people. To date no such survey has been undertaken in Australia and therefore it would be presumptuous to create some culturally-specific occupancy standard.

The lack of a commonly accepted standard of overcrowding for Australia generally is illustrated by the criteria applied in different studies summarised in Table 1.1. It is also useful to look at relevant overseas standards. Given the varying nature of housing markets and social expectations, only countries similar to Australia would appear relevant, especially those of Canada and the United States. Of these two countries, only Canada has adopted a national occupancy standard, shown in Table 1.2.

Table 1.1. Measures of overcrowding: Australian examples.

Source	Criteria
Australian Bureau of Statistics (ABS) 1975 Family Survey (ABS 1980) and Anderton and Lloyd (1991)	Where, after allocating one bedroom to the parent(s) there are, on average, more than two persons per bedroom.
Neutze (1977) and Department of Housing and Construction (1984)	Households with four persons or less need one room per person and, thereafter, one bedroom for each two persons with two additional living rooms.
Burke et al. (1985)	Where there are at least four persons resident in a four-room dwelling and one person for each additional room.
NHS Housing and Locational Choice Survey (National Housing Strategy 1992a)	'High' overcrowding where there are more than two persons per bedroom on average. 'Moderate' overcrowding where there are more than one and less than two people per bedroom.

Source: King 1994.

An analysis of these criteria to determine what each would mean for a standard dwelling of three bedrooms and two living rooms being occupied by a household consisting of a couple and a variable number of dependents is outlined in Table 1.3. While factors such as the age, sex and relationships of dependents have not been taken into account in this analysis, it is clear that most of the measures imply a similar outcome for designating a household as being overcrowded. The variation in Table 1.3 reflects the difference between using a room-based criterion for measuring overcrowding compared to a bedroom-based criterion only.

Table 1.2. Canadian National Occupancy Standard.

Criteria	
i	A minimum of one, and a maximum of two, persons per bedroom.
ii	Parents eligible for a separate bedroom.
iii	Household members aged 18 years and over are eligible for a separate bedroom unless married.
iv	Dependents under 18 years of opposite sex do not share a bedroom if they are aged five years or older.

Source: King 1994.

Table 1.3. Measuring overcrowding in a five-roomed dwelling with three bedrooms for a household consisting of a couple and dependents.

Overcrowding criteria	Number of dependents 0	1	2	3	4	5
ABS 1975 Family Survey (ABS 1980) and Anderton and Lloyd (1991)	no[a]	*no*	*no*	*no*	*no*	yes
Neutze (1977) and Department of Housing and Construction (1984)	no	no	no	no	yes	yes
Burke et al. (1985)	no	no	no	no	yes	yes
NHS Housing and Locational Choice Survey (National Housing Strategy 1992a)	no	no	no	no	no	yes
Canadian National Occupancy Standard	no	no	no	no	no	yes

a. 'no' represents no over-occupancy, 'yes' represents over-occupancy.

In the absence of any agreed Australian standard for overcrowding, this suggests the following criteria:

i parent(s) eligible for a separate bedroom;
ii non-dependent children and other adult household members are eligible for a separate bedroom (unless married);
iii for dependent children, a maximum of two persons per bedroom.

Given the typical bedroom size of an Australian dwelling, an occupancy by any more than two persons, even if desired, would represent an over-utilisation of a bedroom in the vast majority of permanent residential structures. The occupancy standard is thus defined by the functional capacity of a bedroom rather than any cultural standard, whether those of Aboriginal and Torres Strait Islander people or those suggested for the wider Australian society.

While an assessment of housing adequacy based on overcrowding is the only option for most dwelling structures identified in the census, there are some dwelling types which may be defined as unacceptable housing as they do not meet commonly accepted standards for permanent housing in terms of size, quality of construction or amenities. These include caravans and boats, particularly those not in caravan parks or marinas, and sheds, tents, and other temporary structures included in the category of improvised dwellings. For this analysis, caravans and boats are included with other forms of private dwellings and their adequacy as dwellings is assessed on whether or not they are overcrowded by their residents. All families or persons living in improvised dwellings, however, are considered to be overcrowded, irrespective of the number of bedrooms in the dwelling.

Another potential group lacking adequate housing are the Aboriginal and Torres Strait Islander people identified in non-private dwellings on census night. Non-private dwellings include a diverse range of dwelling types ranging from those of incarceration through medical, educational, aged care institutions, boarding houses and hostels. Most of these dwellings are required by the individual for health, travel, recreation, education or corrective reasons. However, hostels for the homeless, night shelters and refuges can be defined as housing of disadvantage as they are normally only required because of the absence of alternative affordable and appropriate accommodation.

Financial housing stress

There are two widely used types of measure of financial housing stress, housing affordability measures and after-housing poverty measures. Housing affordability measures attempt to set standards for the amount of income that a household can afford to pay for their housing, whereas after-housing poverty measures examine the adequacy of residual income available to meet the costs of other essential goods and services.

Affordability

People who cannot afford adequate housing are typically forced to adopt various behavioural strategies which can have major personal and social costs. The most common strategy is to cut back on consumption of other necessary goods and services such as food and clothing. This, in turn, may lead to nutritional and health problems to the detriment of both individual and community. Another, although not necessarily an exclusive response, is to seek more affordable accommodation. This might mean moving to a house of substandard amenity, with implications for health, or to a dwelling that is poorly located in terms of employment, family and community services, with implications for employment opportunities and individual and family support. A third response is to reduce the individual

cost of housing by increasing the number of people able to contribute to the overall cost. This can have implications for overcrowding, for potential family conflict, and for the long-term maintenance of the dwelling.

Housing affordability has been measured in two broad ways. Firstly, an 'access cost to housing' measure has been used to assess the affordability of owner occupation. This is represented by the deposit gap or threshold income, the amount of income necessary to afford a median priced dwelling given current lending conditions and interest rates. Unfortunately, the nature of census data precludes the production of such a measure without further detailed analyses of house prices in each area being examined. Moreover, in terms of the housing conditions of Aboriginal and Torres Strait Islander people, home ownership is of considerably lesser relevance compared to all Australians. Less than one-third of Aboriginal and Torres Strait Islander family households own or are buying their dwelling, compared with about four-fifths of the total population, and the median annual income of Aboriginal and Torres Strait Islander males is about half of the median for other Australian males (Taylor and Gaminiratne 1992: 9; Taylor, 1993b). On these incomes, few Aboriginal and Torres Strait Islander households could afford owner occupancy.

The second measure of affordability is some 'housing cost to income ratio', where typically 25 per cent of income committed to housing costs is deemed the upper limit of affordability. This measure was used by the NHS in its report on housing affordability (National Housing Strategy 1992b). Moreover, the NHS argued that above some level of income the amount of discretionary income would be such as to enable a household to afford housing costs of more than 25 per cent. They therefore established a threshold income level below which any household paying more than 25 per cent of its income in housing costs was deemed to be in a situation of housing stress. This threshold income was defined in two ways, based on data from the ABS 1988 Housing Survey: by the upper income level of the second quintile ($374 per week in 1990 dollars) and, less restrictively, by the upper income level of the fourth quintile ($838 per week in 1990 dollars).

One of the main criticisms levelled at the NHS approach is that it failed to take into account different family size. For example, neither of two households earning $350 a week and paying $85 a week in housing costs would infringe the 25 per cent affordability criteria, yet one might be a single person household and the other a family of five with all the associated expenses. The latter would be much less able to afford $85 a week housing costs than the former. This suggests the use of a household size adjusted affordability ratio in order to produce a more realistic measure of housing stress. The question then becomes one of choosing appropriate ratios. To our knowledge no researchers have attempted to use such a measure in Australia, despite the criticisms of using a single ratio (Kearns 1990; Australian Institute of Health and Welfare 1993: 63-4).

Nevertheless, there is a basis for establishing a sliding ratio using the Henderson Poverty Lines. Since their inception, these poverty lines have always had separate housing cost and non-housing cost components. By taking the housing cost component as a proportion of the total poverty line income for a given group, a housing cost ratio for each household type is obtained. The ratio ranges from 31 per cent for a single person to 20 per cent for a family of six. These proportions have been adapted to provide a sliding 'housing cost to income ratio' scale for various household sizes and are detailed in Table 1.4.

Table 1.4. Housing cost ratios for different household sizes.

Household size	Housing cost ratio Per cent
1	31
2	28
3	25
4	23
5	22

Source: Adapted from Poverty Lines, Australia (1987).

The census identifies dwellings being purchased or rented and collects information on average monthly mortgage payments and on weekly rent. These annual housing costs are 'affordable' if, as a proportion of total household income, they are less than the housing cost to income ratios given in Table 1.4. A higher value indicates a housing affordability problem or a situation of housing stress, since housing costs are a higher proportion of household income than the housing cost ratio for that household size. Note that home owners are excluded from this analysis of affordability problems, since the only housing costs given in the census are mortgage repayments and rents paid by home buyers and renters respectively.

A more fundamental criticism of the use of housing cost to income ratios to assess affordability problems is given by Hancock (1993), who argues 'from economic first principles that it is more logical to use some form of residual income definition'. Housing affordability should, she argues, take account of socially desirable minimum standards of consumption both for housing and for other goods and services, and ratio measures of affordability do not adequately address either of these concerns. This issue is considered after discussion of a measure which uses a residual income definition, after-housing poverty.

After-housing poverty

Poverty is obviously one of the severest social disadvantages an individual or group confronts. Income, or rather the lack of income, is the key direct determinant of poverty. However, housing costs can also create poverty. Consider the situation of two households both on incomes of $300 per week when the poverty line is deemed to be $200 a week. One lives in Sydney and is forced to pay $150 a week in rent, the other in Adelaide and pays rent of $80 a week. After meeting housing costs, the first household falls below the poverty line while the other remains above it. In this context, differential housing costs have created very different income opportunities.

The after-housing poverty measure proposed here is a normative measure which uses the standards established by the Henderson Poverty Inquiry (Commission of Inquiry into Poverty 1975). This Inquiry defined a benchmark income as the disposable income required to support the needs of a family consisting of two adults and two children. The benchmark income established a poverty line for this family type, and poverty lines were then derived for other family types.

Table 1.5. Australian poverty lines, household head not in workforce, June quarter 1991.[a]

Types of family income units	Costs other than housing ($)
Couple	147.20
Couple and one child	191.50
Couple and two children	235.80
Couple and three children	280.20
Couple and four children	323.50
Single person	89.60
Single parent and one child	136.80
Single parent and two children	181.10
Single parent and three children	225.50
Single parent and four children	270.30

a. Based on seasonally adjusted household disposable income from all sources after taxes per head per week for December quarter 1987.

Using the figures in Table 1.5, a poverty line is derived for each income unit (family or individual) in the household and the sum of these values across the income units in the household then gives the weekly household poverty line. It should be noted that the poverty lines used here assume a household head not in the workforce, values which are lower than for a household head in the workforce, and thus provide a conservative estimate of the number of households in after-housing poverty.

An estimate of after-tax household income is derived by adjusting individual pre-tax income data given in the 1991 Census using 1991 tax rates, and summing the results for all income earners in the household aged 15 years or more. A household is deemed to be in after-housing poverty if the after-tax income available to the household after paying mortgage or rent is less than the amount specified by the poverty line as necessary to meet other costs and services.

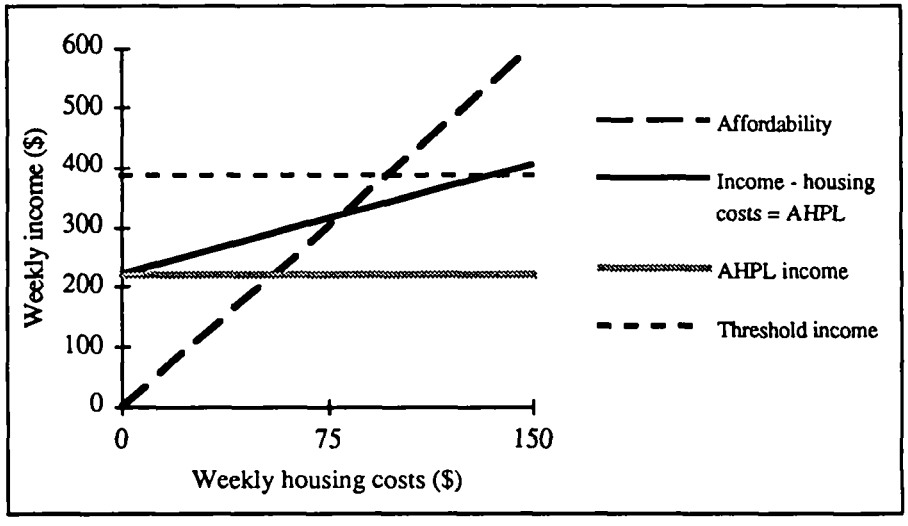
It is our view that there is no requirement to adapt the after-housing poverty measure for Aboriginal and Torres Strait Islander people. They will confront the same other-than-housing costs for necessary goods and services, such as food and clothing, as any population group and therefore must be measured by the same economic standard. There is, of course, the more general criticism that the poverty line reflects a very narrow conception of poverty; one purely defined by income. A more appropriate measure would focus on the resources required to achieve the living conditions and amenities which are customary in the society to which a group or individual belongs (Townsend 1979: 31). Such a measure would capture the cumulative disadvantage that Aboriginal and Torres Strait Islander households experience and would allow for cultural adaptation. Unfortunately no such 'official' measure exists and attempts to do so, as in Townsend's monumental study in Britain, generated as much controversy as it did insights into broader measures of poverty.

A comparison of affordability and after-housing poverty measures

The measures of affordability and after-housing poverty are clearly related, since both measures take account of household income and housing costs. An affordability problem is based on the *ratio* of income to housing costs exceeding a certain level, while after-housing poverty is based on the *difference* between income and housing costs. The association between the two measures is illustrated in Figure 1.1 for a family of three comprising a couple and one child.

The after-housing poverty line (AHPL) in this case is around $195 per week after tax or about $220 before tax, and is shown as a horizontal line (labelled 'AHPL income') parallel to the housing costs axis. The second group of households in after-housing poverty are those whose residual income after housing costs is reduced below the AHPL. They are indicated in Figure 1.1 by the area bounded by the lines where 'Income - housing costs = AHPL' and the 'AHPL income' level. The broken line through the origin (labelled 'Affordability') indicates a housing cost to income ratio of 25 per cent, the level below which a household of this composition is defined as having an affordability problem. The lower threshold income level used here in assessing affordability problems, $385 per week or $20,000 per year (compared to the $374 per week in 1990 dollars used by the NHS) is shown by the broken line parallel to the housing costs axis.

Figure 1.1. Housing costs to income ratio and after-housing poverty for a couple and one child.



Restricting the analysis of affordability problems to those below the threshold income level of $20,000 per year essentially limits affordability problems to those families in after-housing poverty. Relatively few families at these income levels with an affordability problem will not suffer after-housing poverty, although this proportion will vary according to household composition. On the other hand, the lowest income families with the lowest housing costs, and thus perhaps the worst housing conditions, are not identified as having housing affordability problems by the housing cost to income ratio measure.

Families with income below the AHPL income level clearly have a housing affordability problem, no matter how low their housing costs. Any housing costs they do have reduce their access to other essential goods and services. The fact that some families with income at this level are not identified as having an affordability problem is clearly a limitation of the ratio measure, particularly when applied to low income families living in rural and remote areas, a situation not unusual among the Aboriginal and Torres Strait Islander population.

These conclusions are consistent with the findings of the recent review of housing need conducted by the Australian Institute of Health and Welfare (1993: 60-5). Their comparisons of the two measures found more income units in after-housing poverty than with affordability problems (794,000 and 620,000 respectively in 1990). The two measures also gave conflicting trends over the last decade, with an increase in after-housing poverty and a decline in affordability problems.

The report explains this difference as being due to 'a fundamental weakness in the NHS approach, the lack of an equivalence scale ... (which) adjusts to take account of the size and type of income unit as well as the workforce status of the family heads'. The report also notes that 'The Henderson methodology picks up considerably more two parent and one parent income units (income units with children), than does the NHS approach', a comment consistent with the fact that the affordability measure fails to identify low income families living in inadequate, low cost housing. These limitations lead the report to conclude that 'This deficiency in the NHS measure has major equity implications for any policy proposals seeking to alleviate financial housing stress based on the NHS affordability benchmark'.

For these reasons, the analyses of financial housing stress in this monograph rely only on the after-housing poverty measure. After-housing poverty is usually considered to be a more severe form of housing disadvantage and is also more likely to be a problem for low income households. In addition, it allows two different forms of after-housing poverty to be identified: households which are in poverty even before their housing costs are taken into account, and those whose housing costs result in their residual income being lower than the accepted levels required for other goods and services.

2. Overcrowding and housing need

The evidence presented to the House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs (1992) consistently identified overcrowding as a major problem resulting, in part, from 'the marked shortfall in housing supply, including the lengthy waiting periods for rental accommodation'. Low incomes and other problems which restrict access to private rental or other forms of accommodation result in extended periods of homelessness and dependence on family and friends for accommodation. Thus, while 'some families may choose to have the extended family under one roof regardless of whether there is sufficient housing available for all members, most overcrowding is due to additional families being homeless' (House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs 1992: 135-6).

Itinerancy is another important factor explaining the relatively high levels of overcrowding and homelessness among the Aboriginal and Torres Strait Islander population. People from remote rural areas are reported to be 'highly mobile and make short- to long-term visits to urban centres, ... often choosing to camp in parks and bushland on the fringes of towns or where there are established town camps'. 'Many would not utilise Aboriginal hostels or other institutional arrangements as they are seen to have too many rules and regulations and the accommodation is not suitable or appropriately designed for transient fringe dwellers' (House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs 1992: 154-6).

Itinerant young people, attracted to the major towns and cities by employment and recreation opportunities and overcrowded housing in rural areas, add to homelessness and overcrowding in urban areas. These young people rarely use youth refuges and hostels and cannot afford private rented accommodation; rather 'they use family networks to meet their accommodation needs and thereby add pressure to urban dwelling family households by creating overcrowding and placing added financial burden on the household'. One solution to this problem suggested as 'a priority need that must be addressed urgently' is 'the provision of affordable housing to alleviate overcrowding' (House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs 1992: 158-161).

While it is not possible with census data to identify the extent to which itinerancy, homelessness or preferences effect the overcrowding and housing need estimates obtained in this analysis, the levels of overcrowding and housing need associated with improvised dwellings, with multi-family and extended family households, as well as those in refuges and shelters, are indicative of the high degree of housing need and housing disadvantage of Aboriginal and Torres Strait Islander people. Further, the number of elementary primary families living in overcrowded

dwellings, often exacerbated by the presence of friends and relatives, indicates a substantial degree of housing stress among those able to obtain housing.

The results in this chapter provide some much needed empirical evidence on the extent of overcrowding in Aboriginal and Torres Strait Islander dwellings. Methods used to assess overcrowding and housing need from the census are outlined and national estimates of housing need presented in the following section. National estimates are then disaggregated, firstly to examine the variation between major urban, other urban and rural areas and between types of tenure, and secondly to show the geographic variation in housing need between States and Territories and between ATSIC regional council areas.

Definition of overcrowding and housing need

Determining a measure of overcrowding is difficult because there is no agreed standard as to what represents overcrowding for Australian households and because the census contains limited information on dwellings, namely the dwelling structure and the number of bedrooms. In the absence of any such standard and in the light of the review of measures presented in Chapter 1, this study suggests, and uses, a simple set of criteria based on the number of families, adults and children in the household and the number of bedrooms identified for the dwelling by the census.

In particular, the bedroom requirement of each household and each family is determined using the following criteria:

i a married or de facto couple require one bedroom;
ii any other adult member of the household requires one bedroom;
iii dependent children share to a maximum of two per bedroom;
iv persons who are recorded as temporarily absent from the dwelling on census night are included in the assessment of bedroom requirement; and
v non-family members aged 15-24 years studying full-time and visitors are assumed to be temporary residents only and are excluded from the calculation of bedroom requirements. It is assumed they will be identified as temporarily absent from their family residence.

For example, a married couple (or a single parent) with one or two dependent children will require two-bedroom accommodation. Any additional adults resident in the dwelling will each require an additional bedroom, unless they include a married couple who share.

In households identified by the census as containing more than one family, the bedroom requirement of each family is computed separately. These family requirements are then added, along with that of any other

adult non-family members, to give the total bedroom requirement of the household. If the total bedroom requirement is greater than the number of bedrooms in the dwelling, the dwelling is defined as being overcrowded. In group households, each person is allocated a separate bedroom under the rules applied here, and the dwelling is overcrowded if the number of adults in the household is greater than the number of bedrooms. Lone person households are assumed not to be overcrowded.

The one exception to these rules is for families or persons defined in the census as living in improvised dwellings. In this case, all members of the dwelling are considered to be overcrowded, irrespective of the number of bedrooms in the improvised dwelling, and lone person households are also included. In addition, individuals defined by the census as being resident in hostels for the homeless, night shelters or refuges are defined to be in housing need.

The census identifies an Aboriginal or Torres Strait Islander dwelling as any private dwelling which includes at least one person who identifies as being of Aboriginal or Torres Strait Islander origin. Table 2.1 shows the 1991 Census classification of these dwellings, excluding the improvised dwellings, into seven household types. The first three types identify family dwellings which must house a primary family. In addition to the primary family, the household may contain one or two other families, and also unrelated adults (boarders). The primary family may include relatives of the family reference person or their spouse, or consist of a group of related adults. Other families must be 'elementary' families, containing a single parent or couple and their offspring only. Non-family household types may be either a group of unrelated adults or a lone person household. Visitors may also be present in each of these types of household on census night, but households containing only visitors are separately identified. A small number of households where the only persons present on census night are children under 15 years of age are coded as 'not classifiable'.

In this analysis of overcrowding, not classifiable households and households in which the only persons of Aboriginal or Torres Strait Islander origin are visitors or full-time students aged 15-24 years are excluded. Dwellings in which overcrowding cannot be assessed because the number of bedrooms is not known are also excluded. Collectively, these exclusions reduce the number of non-improvised Aboriginal and Torres Strait Islander dwellings identified from 82,199 to 75,991. Of these eligible dwellings, 16,466 or 21.7 per cent are assessed as being overcrowded. Over four-fifths (81.3 per cent) of households which contain two families and almost all (98.5 per cent) three family households are overcrowded, compared with one-fifth of one family households (Table 2.1). In these non-improvised dwellings, all 6,217 lone person households are defined as not overcrowded.

Table 2.1. Overcrowding by household type: non-improvised dwellings.

Household type	Number of dwellings	Indigenous visitors/ students	Bedrooms not stated	Total eligible dwellings	Overcrowded eligible dwellings Number	Per cent
Family household						
one family	65,418	(1,198)	(1,776)	62,444	12,966	20.8
two families	2,960	(7)	(176)	2,777	2,258	81.3
three families	596	(0)	(69)	527	519	98.5
Group household	4,780	(580)	(174)	4,026	723	18.0
Lone person household	6,847	(630)		6,217	0	0.0
Visitors only	1,262	(1,262)				
Not classifiable	336	(336)				
Total	82,199	(4,013)	(2,195)	75,991	16,466	21.7

Source: 1991 Census of Population and Housing.

The procedure used to determine housing need in these overcrowded family households involves a number of further steps, the effects of which are shown in Table 2.2. The first step identifies any second and third families in overcrowded multi-family households, and the number of bedrooms required to rehouse each family is assessed. The bedroom requirement of the remaining primary family, and any boarders, is calculated to assess whether those remaining in the dwelling are still overcrowded. As shown in the first panel of Table 2.2, rehousing second and third families in the 2,777 overcrowded multi-family households relieves overcrowding in 1,380 dwellings, but 1,397 dwellings remain overcrowded.

The second step identifies the effect of boarders on overcrowding in family dwellings. As shown in the second panel of Table 2.2, there are 5,520 family households with resident boarders, of which 3,126 (56.6 per cent) are overcrowded. Rehousing the boarders in these dwellings relieves overcrowding for 1,931 families, but 1,195 families remain overcrowded.

After removing any second or third families and boarders, only primary family members remain in the dwelling. A primary family usually consists of an 'elementary' family of a single parent or couple, with dependent and/or non-dependent offspring. However, single adult relatives of the parent or couple may also be included as members of the primary family and, in cases where there is no elementary family resident in the dwelling, a primary family may include related adults only. Not surprisingly, as shown in the third panel of Table 2.2, a primary family with related adults present is much more likely to be overcrowded than an elementary primary family alone. Of the 10,275 families of this type, including 1,420 families of related adults only, more than half (5,553

families or 54 per cent) are overcrowded (net of any other families or boarders in the dwelling). Rehousing related adults from these overcrowded dwellings relieves overcrowding for 3,283 elementary primary families and 371 families of related adults, leaving 1,899 elementary primary families still overcrowded.

Table 2.2. Rehousing second and third families, boarders and primary family related adults in family households: non-improvised dwellings.

Household type	Total eligible dwellings	Overcrowded eligible dwellings Number	Per cent
All family households	65,748	15,743	23.9
one family households	62,444	12,966	20.8
two or three family households	3,304	2,777	84.0
After rehousing overcrowded second and third families	2,777	1,397	50.3
Primary family households with/without boarders	65,748	14,363	21.3
No boarders present	60,228	11,237	18.7
Family with boarders	5,520	3,126	56.6
After rehousing overcrowded boarders	3,126	1,195	38.2
Primary family households with/without related adults	65,748	12,432	18.9
No related adults present	55,473	6,879	12.4
Family of/with related adults present[a]	10,275	5,553	54.0
After rehousing overcrowded related adults	5,553	1,899	34.2
Elementary primary family households	64,328	8,778	13.6

a. This includes 1,420 primary families of related adults only, of which 371 are overcrowded. This reduces the number of elementary primary family households from 65,748 to 64,328.

Source: 1991 Census of Population and Housing.

The final step in determining the housing need of family households examines the additional bedroom requirements of the 8,778 elementary primary families assessed as overcrowded, even when other household members are excluded. However, not all members of an Aboriginal or Torres Strait Islander dwelling may be Aboriginal or Torres Strait Islander. For example, there are a substantial number of primary families where a single parent or couple do not identify themselves as Aboriginal or Torres Strait Islander people, and the classification of the dwelling as an Aboriginal or Torres Strait Islander dwelling is based only on the origin of family children. Similarly, some boarders and related adults do not identify as being of Aboriginal or Torres Strait Islander origin, and group households may include both indigenous and non-indigenous members.

The mix of indigenous and non-indigenous persons within families and dwellings poses some difficulties in defining Aboriginal or Torres Strait Islander housing need, and the approach taken here provides, in our view, the most conservative estimate of that need. Each elementary family is defined as an indigenous family only if either the family reference person or their spouse identify as an Aboriginal or Torres Strait Islander. Families in which one or more children are Aboriginal or Torres Strait Islander but the parent or parents present in the household on census night are not are therefore excluded. The estimates of housing need are then defined only in terms of the needs of indigenous elementary families and other individual adults of Aboriginal or Torres Strait Islander origin. While non-indigenous families and non-family individuals may need to be rehoused to relieve overcrowding in Aboriginal or Torres Strait Islander dwellings, their housing needs are excluded from our estimates.

Families with no indigenous parent identified but with indigenous children are a surprisingly large proportion of the primary families in the Aboriginal and Torres Strait Islander dwellings defined by the census. For example, of 63,780 elementary primary families in one family households, 9,249, almost one in seven, have no indigenous parent present.

Table 2.3. Primary families with no indigenous parent(s) present and one or more indigenous offspring: one family households.[a]

Parent(s) non-indigenous	One offspring indigenous	Two or more offspring		
		Some indigenous	All indigenous	Total
Single parent	1,786	1,814	1,700	5,300
Two parents				
one absent	137	204	102	443
both present	829	755	1,922	3,506
Total	2,752	2,773	3,724	9,249

a. Includes 15 families living in improvised dwellings.

Source: 1991 Census of Population and Housing.

As shown in Table 2.3, very few of these are families in which an indigenous parent might have been absent on census night: only 443 families are recorded as having one parent absent. In 3,506 two-parent families, neither parent is indigenous, the remaining 5,300 being single parent families. The indigenous children in these families may be adopted or fostered, or the children of a previous marriage. On the other hand, the possibility of some errors of this type in the census cannot be entirely discounted.

The decision to exclude these families from the assessment of Aboriginal and Torres Strait Islander family housing need reflects uncertainty as to whether these families identify themselves as Aboriginal and Torres Strait Islander families, or would be considered eligible for assistance, particularly housing assistance, which aims to improve the situation of Aboriginal and Torres Strait Islander people. Whatever the case, the results in the following section (see Table 2.6 below) indicate that the housing need of these families broadly reflects their proportion of elementary primary families: including them in the analysis would increase the bedroom need of elementary primary families by about 13 per cent, adding 4 per cent to the total housing need assessment.

In overcrowded group households, the housing need of Aboriginal or Torres Strait Islander household members is determined in proportion to their representation in the household. For example, for a group of five people in a three bedroom house, two members of the group require rehousing. If all persons in the group are Aboriginal or Torres Strait Islander, the housing requirement is two bedrooms. However, if two of the group are Aboriginal or Torres Strait Islander and three are not, the Aboriginal or Torres Strait Islander housing need is expected to be 2 x 2/5 or 4/5 bedrooms.

Where overcrowding is due to adult non-family members (boarders) living with a family in a private dwelling, the same procedure as for group households is applied. Thus, for example, if a primary family requiring two bedrooms has two boarders sharing a three bedroom house, the dwelling is over-occupied by one boarder. If both boarders are Aboriginal or Torres Strait Islander, one Aboriginal or Torres Strait Islander requires housing; if only one boarder is Aboriginal or Torres Strait Islander the probability that an Aboriginal or Torres Strait Islander requires housing is 1/2. If neither boarder is Aboriginal or Torres Strait Islander, there is no contribution to Aboriginal and Torres Strait Islander housing need.

National estimates of housing need

The housing need of second and third elementary families living in overcrowded non-improvised dwellings is shown in Table 2.4. The 2,777 dwellings of this type (see Tables 2.1, 2.2) contain 3,296 such families, of which 158 have no indigenous family members and 125 have indigenous offspring only. After excluding these families, 3,013 families are identified as being in housing need, with a total bedroom requirement of 6,409 bedrooms. Just less than one-fifth (572 or 19 per cent) of the families are a couple and need one bedroom only, and the majority (1,726 or 57 per cent) are a single parent or couple with one or two children requiring two bedroom accommodation. However, almost one in four (715 or 24 per cent) have three or more dependent children in the family and need, at least, a three bedroom dwelling.

Table 2.4. Housing need of second and third families in overcrowded multi-family households: non-improvised dwellings.

Family type	Number of families	Housing need Number of bedrooms
Second and third families in overcrowded dwellings	3,296	
No indigenous family members	(158)	(283)
No indigenous parent: indigenous offspring only	(125)	(271)
Indigenous families housing need		
one bedroom need	572	572
two bedroom need	1,726	3,452
three bedroom need	539	1,617
four+ bedroom need	176	768
Total	3,013	6,409

Source: 1991 Census of Population and Housing.

Table 2.5. Housing need of boarders and primary family related adults in overcrowded family households: non-improvised dwellings.

Type of boarder/related adult	Number of persons	Housing need Number of bedrooms
Boarders in overcrowded dwellings	4,279	
Non-indigenous boarders	(1,573)	(1,385)
Indigenous boarders	2,706	2,509
Related adults in overcrowded dwellings	9,861	
Non-indigenous related adults	(927)	(772)
Indigenous related adults	8,934	7,675

Source: 1991 Census of Population and Housing.

Table 2.5 gives estimates of the housing need of boarders and related adults in overcrowded family households. Boarders, numbering 4,279, contribute to overcrowding in 3,126 family households (see Table 2.2). Clearly some dwellings have more than one boarder and most, though not all, of these boarders need to be rehoused: 385 boarders can remain without causing overcrowding. The remaining 3,894 boarders, of which 2,509 are of Aboriginal or Torres Strait Islander origin, contribute to overcrowding.

The presence of adult relatives of the primary family in the household has a similar effect on overcrowding to that of boarders and they are treated similarly in this analysis. The 5,553 overcrowded family

households with related adults present (see Table 2.2) include a total of 9,861 related adults, of which 8,447 contribute to overcrowding and 7,675 are indigenous adults in housing need.

The additional bedroom need of the elementary primary families remaining in overcrowded dwellings is shown in Table 2.6. Of these families only 75 have no indigenous family members, the dwelling being included because of an indigenous second or third family, boarder or relative. More significantly, 1,180 of these families are excluded because the single parent or couple are not indigenous, although a family child is indigenous. The remaining 7,523 families require a total of 10,995 additional bedrooms to relieve overcrowding in their current dwellings. In 70 per cent of these cases (5,273 families), the additional requirement is for one additional bedroom, a further 20 per cent (1,483 families) require two additional bedrooms, while one in ten families require three or more additional bedrooms.

Table 2.6. Housing need of 'elementary' primary families in overcrowded family households: non-improvised dwellings.

'Elementary' primary family type	Number of families	Housing need Number of bedrooms
'Elementary' families in overcrowded dwellings	8,778	
No indigenous family members	(75)	(91)
No indigenous parent-indigenous offspring only	(1,180)	(1,458)
Indigenous families housing need		
one additional bedroom need	5,273	5,273
two additional bedroom need	1,483	2,966
three additional bedroom need	480	1,440
four+ additional bedroom need	287	1,316
Total additional bedroom need	7,523	10,995

Source: 1991 Census of Population and Housing.

In overcrowded group households, Aboriginal and Torres Strait Islander housing need is determined in proportion to their representation in the household. The 723 overcrowded group households include 2,338 persons, divided almost equally between indigenous and non-indigenous household members (Table 2.7). Overcrowding is relieved by rehousing 972 household members, of which 528 are indigenous adults.

The housing need of indigenous elementary families and other persons living in improvised dwellings is shown in Table 2.8. There are 1,410 improvised family dwellings housing 1,706 elementary families, of which 1,687 are indigenous families with a total bedroom requirement of 4,414 bedrooms. These dwellings also house 226 indigenous boarders (and

seven non-indigenous boarders) and 1,247 indigenous related adults (and four non-indigenous related adults). In addition, 114 group households in improvised dwellings house 231 indigenous adults (and 24 non-indigenous adults), and there are 188 improvised lone person dwellings with an indigenous resident.

Table 2.7. Housing need of adults in overcrowded group households: non-improvised dwellings.

Type of group member	Number of persons	Housing need Number of bedrooms
Adults in overcrowded group households	2,338	
Non-indigenous household members	(1,182)	(444)
Indigenous household members	1,156	528

Source: 1991 Census of Population and Housing.

Table 2.8. Housing need of families and adults in improvised dwellings.

Type of housing need	Number of families/persons	Housing need Number of bedrooms
'Elementary' families in improvised dwellings	1,706	
No indigenous family members	(4)	
No indigenous parent-indigenous offspring only	(15)	
Indigenous families housing need		
one bedroom need	353	353
two bedroom need	612	1,224
three bedroom need	385	1,155
four+ bedroom need	337	1,682
Total family need	1,687	4,414
Indigenous boarders	226	226
Indigenous related adults	1,247	1,247
Indigenous group household members	231	231
Lone person household members	188	188
Total individual adults need	1,892	1,892

Source: 1991 Census of Population and Housing.

These results are combined and summarised in Table 2.9 to give a national estimate of Aboriginal and Torres Strait Islander housing need. The total of

58,689 elementary families includes all primary, second and third families with at least one indigenous parent present identified in the eligible non-improvised and improvised dwellings. Similarly, the figures for boarders, related adults and group household members are the total number of indigenous adults in each category living in eligible family and group households respectively. The 971 other adults include 188 indigenous adults in improvised lone person dwellings and 783 indigenous persons identified by the census as resident in hostels for the homeless, night shelters or refuges.

Families in improvised homes or sharing overcrowded dwellings are described as 'homeless' families, while primary families with additional bedroom need are said to be 'in housing stress'. This distinction is not made for boarders, relatives or other adults. Although those in improvised dwellings, refuges and shelters might readily be considered homeless and represent 20 per cent of the identified housing need of these adults, this ignores the hidden homelessness of boarders and related adults in overcrowded family households. All of these adults are simply described as being 'in housing need'.

Family homelessness and bedroom need aggregates the housing need of second and third families in overcrowded non-improvised dwellings (Table 2.4) and all families in improvised dwellings (Table 2.8). The next section of the table repeats the results of Table 2.6, showing family housing stress and bedroom need for elementary primary families in overcrowded non-improvised dwellings (net of other families and adults in the household). Other adult housing need combines the results of Tables 2.5, 2.7 and 2.8 for boarders and related adults in family households, and aggregates the bedroom need of group household members, lone persons in improvised dwellings, and indigenous persons in hostels for the homeless, night shelters or refuges.

The results in Table 2.9 show 4,700 elementary indigenous families, 8 per cent of all indigenous elementary families, either living in an improvised dwelling (1,687 families) or sharing an overcrowded dwelling with a primary family (3,013 families). Taking account of the severe housing disadvantage of these families requires an additional 10,823 bedrooms, 31 per cent of the total indigenous housing need of 35,205 bedrooms. In a substantial number of households, overcrowding is a result of the presence of boarders or, more frequently, relatives living with the primary family. Theoretically, provision of alternative accommodation for these non-dependent adults would reduce the number of overcrowded family dwellings by one-third, from 14,363 to 8,778 (Table 2.2). This reduction in overcrowding for families, however, involves rehousing a very large proportion of the boarders and related adults now resident in family dwellings. Of 4,264 unrelated Aboriginal and Torres Strait Islander adults currently boarding with families, 2,735 or 64 per cent would need to be rehoused. Similarly, 8,922 related adults or 59 per cent of the total of 15,030 would have to be rehoused.

Table 2.9. National summary of indigenous population and total housing need.

Eligible population and type of housing need	Family units/persons
Eligible population	
Elementary families	58,689
Boarders	4,264
Related adults	15,030
Group members	5,200
Other adults	971
Family homelessness and bedroom need	
Improvised dwelling	1,687
Second or third family	3,013
Total families	4,700
one bedroom household	925
two bedroom household	2,338
three bedroom household	923
four+ bedroom household	514
Total bedroom need	10,823
Family housing stress and bedroom need	
Total primary families	7,523
one additional bedroom	5,273
two additional bedrooms	1,483
three additional bedrooms	480
four+ additional bedrooms	287
Total bedroom need	10,995
Other adult housing need	
Improvised dwelling	1,892
Other dwelling	11,495
Total bedroom need	13,387
Boarders	2,735
Related adults	8,922
Group/other adults	1,730
Total bedroom need	35,205

Source: 1991 Census of Population and Housing.

Taking account of the housing need of these families, boarders and family relatives still leaves 7,523 (14 per cent) of indigenous primary families overcrowded in their current dwellings. The overcrowding appears, in most cases, not to be too severe, with 70 per cent of the families needing one additional bedroom only. However, for the remaining 30 per cent, an additional need of two or more bedrooms indicates housing which is clearly inadequate on this criterion. The 10,995 additional bedrooms needed to relieve family housing stress represent a further 31 per cent of the total housing need assessment.

Where single indigenous adults have established group households, often with other non-indigenous adults, there is relatively little overcrowding. Of the 4,969 indigenous group household members living in

non-improvised dwellings, only 528 are assessed as being in housing need. The remaining housing need is the result from 419 adults living in group or lone person improvised dwellings and 783 adults in refuges or shelters. The 13,387 single indigenous adults in housing need account for 38 per cent of the total housing need assessment.

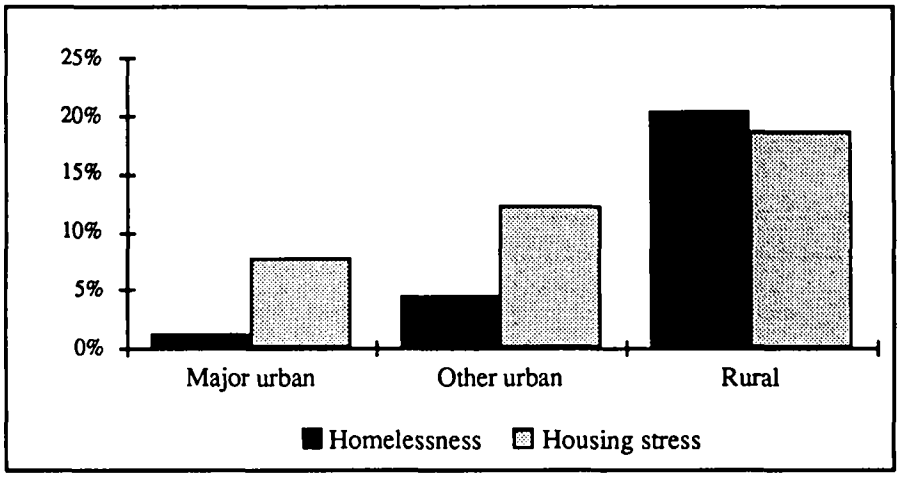
Overcrowding, urban-rural location, tenure and rental type

Overcrowding by section-of-State

The results in Table 2.9 provide a useful summary for comparisons between different geographic areas and different populations. In this section, the variations in housing need between urban and rural areas, and between tenure and type of rental are presented. Geographic variations between States and Territories and across the 36 ATSIC regional council areas are examined in the final section.

Figure 2.1 compares the levels of family housing need in major urban, other urban and rural areas. The results are given in Table 2.10 at the end of this section. In major urban centres, just over 1 per cent of elementary families (215 families) are homeless and a further 7.9 per cent (1,386 families) are in housing stress. In other, smaller, urban centres, the corresponding proportions increase to 4.5 and 12.3 per cent respectively. In rural areas, one in every five elementary families (3,390 families or 20.3 per cent) are assessed as homeless, and a slightly smaller number (3,124 families or 18.7 per cent) as being in housing stress. Taken together, these results show almost two-fifths of all indigenous families in rural areas have inadequate or overcrowded housing, compared with one-tenth of those in major urban centres and one-sixth of those in other urban areas.

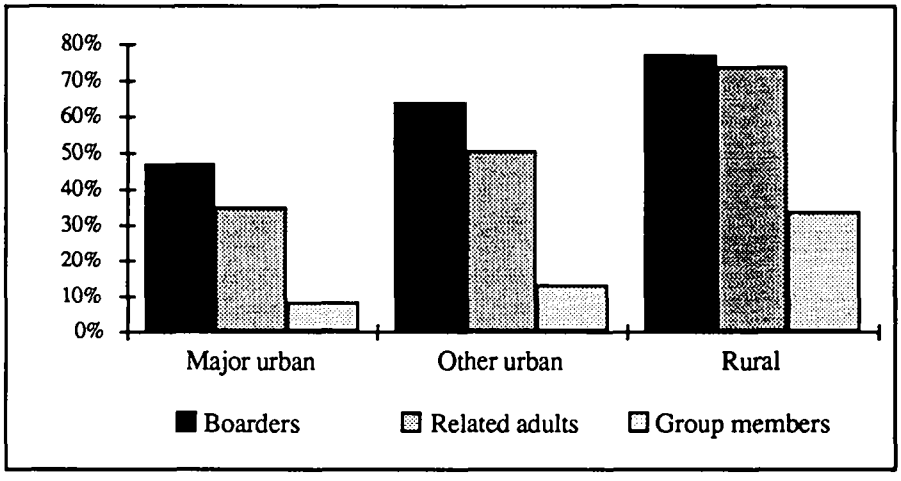
Figure 2.1. Per cent of elementary families in housing need by section-of-State.



Source: Table 2.10.

The high proportion of homeless families in rural areas is clearly influenced by the fact that most improvised dwellings are located there, particularly in rural Western Australia and the Northern Territory (Table 2.14 below). Families in improvised dwellings in rural areas account for almost half of all homeless families, compared to one-fifth of the homeless in other urban centres and none of the homeless in major urban areas. Nevertheless, more than one-ninth of families in rural areas share overcrowded non-improvised accommodation, a significantly higher proportion than in urban areas (Table 2.10).

Figure 2.2. Per cent of boarders, related adults and group household members in housing need by section-of-State.



Source: Table 2.10.

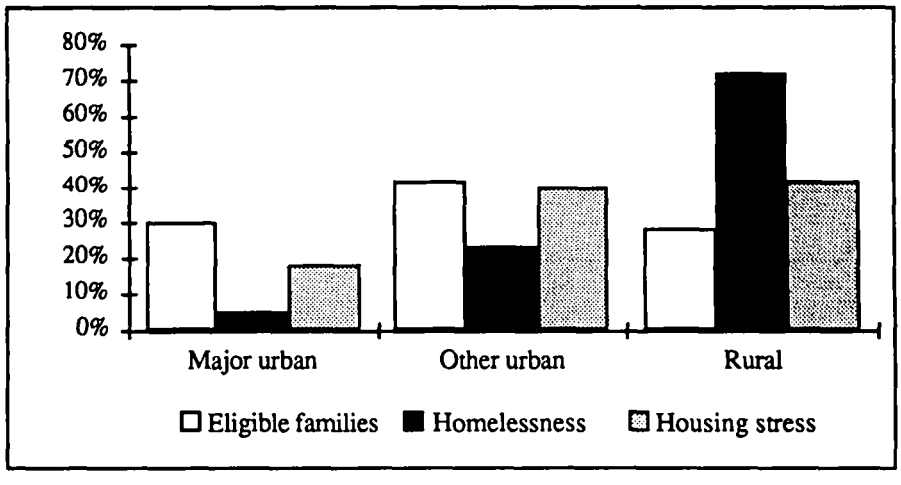
This general pattern of lesser need in major urban centres and greater need in rural areas is reflected in the results for boarders, related adults and group household members (Figure 2.2). In each of these categories, the proportion of adults contributing to overcrowding and in housing need is lowest in the major urban centres and highest in rural areas. In major urban areas, almost half the boarders (47 per cent) and over one-third of related adults (35 per cent) contribute to overcrowding in family households. The corresponding proportions for other urban centres are about two-thirds (64 per cent) and one-half (51 per cent) respectively, rising to about three-quarters of both groups (77 and 74 per cent respectively) in rural areas. Group household members are much less likely to be overcrowded, particularly in urban areas, although one-third (34 per cent) of the 1,026 group members living in rural areas are overcrowded.

Figure 2.3 compares the population distribution between major urban, other urban and rural areas, to the distribution of housing need

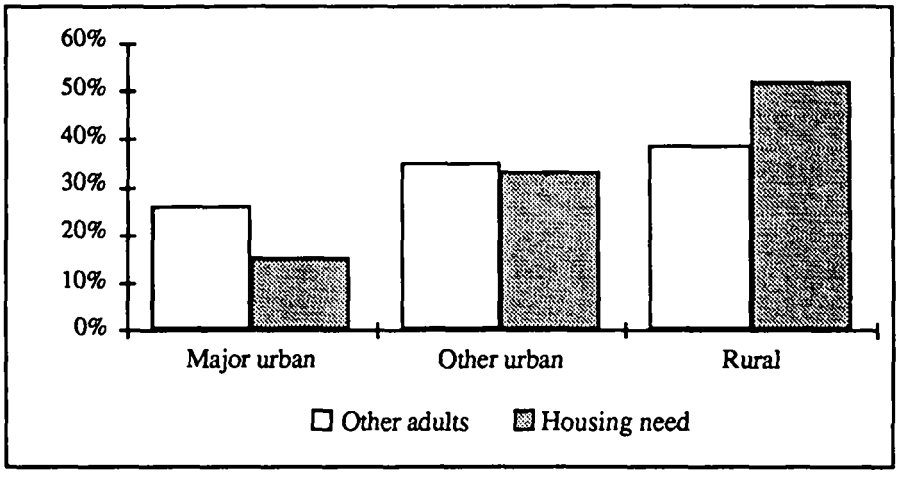
separately for elementary families and other adults. For elementary families, 30 per cent live in major urban centres, 42 per cent live in other urban centres, with the remaining 28 per cent resident in rural areas. In comparison, family housing need is, as Figure 2.3 clearly indicates, disproportionately located in rural areas.

Figure 2.3. Per cent of eligible population and total bedroom need by section-of-State.

a. Elementary families



b. Other adults



Source: Table 2.10.

Table 2.10. Summary of population and total housing need by section-of-State.

Eligible population/ housing need	Family units/persons by section-of-State Major urban	Other urban	Rural
Eligible population			
Elementary families	17,523	24,446	16,720
Boarders	1,147	1,619	1,498
Related adults	2,557	5,401	7,072
Group members	2,519	1,655	1,026
Other adults	389	353	229
Family homelessness and bedroom need			
Improvised dwelling	0	238	1,448
Second or third family	215	857	1,942
Total families	215	1,095	3,390
one bedroom household	34	210	681
two bedroom household	163	591	1,584
three bedroom household	14	200	709
four+ bedroom household	4	94	416
Total bedroom need	420	2,411	7,992
Family housing stress and bedroom need			
Total primary families	1,386	3,013	3,124
one additional bedroom	1,156	2,220	1,897
two additional bedrooms	184	542	757
three additional bedrooms	31	173	276
four+ additional bedrooms	15	78	194
Total bedroom need	1,681	4,185	5,129
Other adults housing need			
Improvised dwelling	10	308	1,574
Other dwelling	2,007	4,059	5,429
Total bedroom need	2,017	4,367	7,003
Boarders	540	1,036	1,159
Related adults	892	2,768	5,262
Group/other adults	585	563	582
Total bedroom need	4,118	10,963	20,124

Source: 1991 Census of Population and Housing.

Of the 4,700 homeless families, 72 per cent (3,390 families) live in rural areas, 23 per cent (1,095 families) in smaller urban centres and only 5 per cent (215 families) are resident in major urban centres. Also, primary families living in rural areas are most likely, and those in major urban centres are least likely, to be in housing stress (net of the needs of other household members). Combining the bedroom need of families in these two categories shows the majority of housing need, 60 per cent, to be in rural areas, with 30 per cent in other urban centres and 10 per cent in major urban centres.

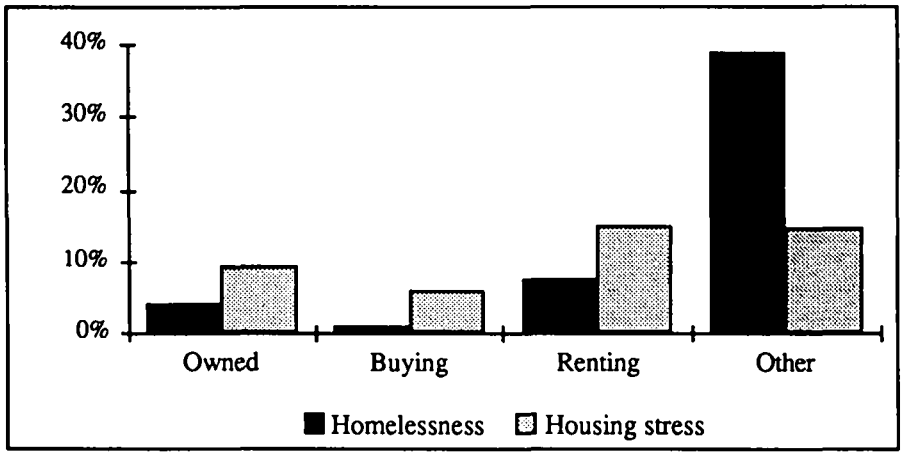
Results for other adults, combining boarders, related adults, group members and other adults, show a similar pattern to that for families. As

indicated by Figure 2.2, these adults are more likely to be in overcrowded dwellings in rural areas than in urban centres. Thus, while one-quarter (26 per cent) of these adults live in major urban centres and two-fifths (39 per cent) live in rural areas, those assessed as being in housing need because of overcrowded or inadequate housing are distributed 15 and 52 per cent respectively between these areas (Figure 2.3).

Overcrowding by tenure

The association between housing tenure and overcrowding is summarised in Table 2.11 at the end of this section and illustrated in Figures 2.4, 2.5 and 2.6 below. Figure 2.4 shows the proportion of elementary families in each tenure category identified as homeless or in housing stress, and Figure 2.5 shows corresponding proportions for boarders, related adults and group members in housing need. Figure 2.6 compares the population distributions by tenure with the distributions of housing need.

Figure 2.4. Per cent of elementary families in housing need by tenure.

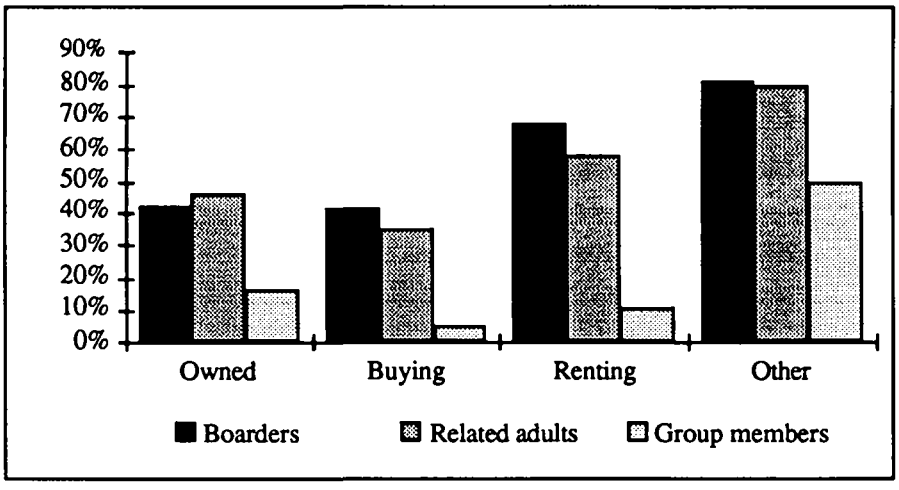


Source: Table 2.11.

Clearly, homeless families are heavily represented in the 'other' tenure category (Figure 2.4). This category includes dwellings where tenure is inadequately described, not applicable or not stated, and the high proportion of homeless families is a reflection of the number of improvised dwellings; 1,142 families, four-fifths of the homeless in this category, live in improvised dwellings (Table 2.11). For the remaining families not living in improvised dwellings, the proportions of homeless families (12 per cent) and of families in housing stress (21 per cent) are similar to, though slightly higher than, those of families in non-government rental accommodation (see Figure 2.7 below). It seems probable that this is the appropriate tenure category for most of these households.

Comparing the three defined tenure categories, families in rented accommodation have a higher probability of homelessness and housing stress than those in dwellings owned or being purchased. Families in dwellings being purchased have the lowest rate of housing need, with just 1 per cent homeless and 6 per cent in housing stress from overcrowding. Home owners, presumably more established in their dwellings, are more likely than home buyers to house other homeless families and more likely to be overcrowded: 4.1 per cent of the families in these dwellings are homeless and 9.5 per cent are in housing stress. In rented dwellings, almost one in four families are either homeless (7.4 per cent) or in housing stress (14.9 per cent).

Figure 2.5. Per cent of boarders, related adults and group household members in housing need by tenure.



Source: Table 2.11.

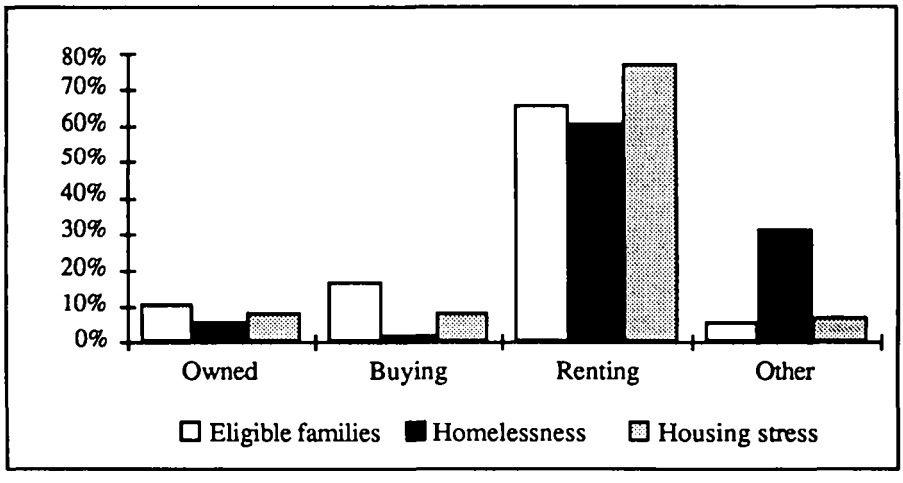
As shown in Figure 2.5, around 40 per cent of boarders and related adults living with families who own or are buying their dwellings contribute to overcrowding. The great majority of these single adults are however in rented accommodation, shared with a family, where they are more likely to be overcrowded: 68 per cent of boarders and 58 per cent of primary family related adults in rented housing are assessed as being in housing need. Three-quarters of indigenous group household members are renting, with 11 per cent in housing need. The high proportions in housing need in the other tenure category again reflect the effect of improvised dwellings.

Figure 2.6 shows the percentage distribution of elementary families and other adults by tenure and the corresponding distribution of housing need. Two-thirds of all indigenous elementary families are in rented

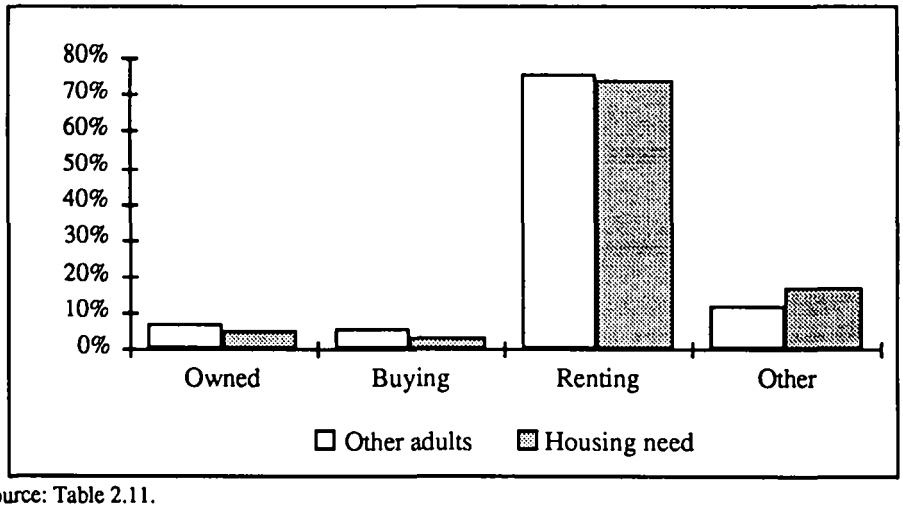
dwellings and only 28 per cent live in dwellings which are owned (11 per cent) or being purchased (17 per cent). Boarders, related adults and group members are even less likely than families to be in non-rented accommodation: 75 per cent of their residences are rented, 7 per cent owned and 6 per cent being purchased, with the remaining 12 per cent in dwellings of undefined tenure.

Figure 2.6. Per cent of eligible population and total bedroom need by tenure.

a. Elementary families



b. Other adults

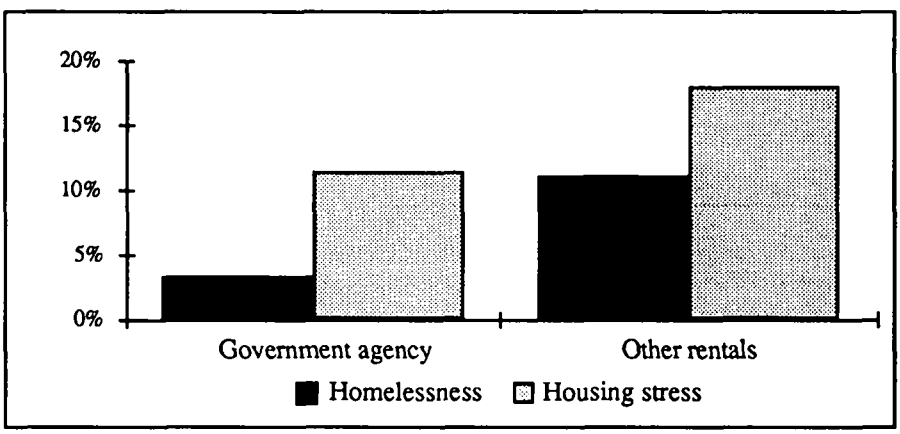


Source: Table 2.11.

As indicated by the discussion above, homeless families, particularly those in improvised dwellings, are heavily overrepresented in the other tenure category, with almost one-third (31 per cent) included in this category. A further three-fifths (61 per cent) of homeless families are in rented dwellings. However, excluding families in improvised dwellings from these calculations shows four-fifths (81 per cent) of homeless families in multi-family households in rented housing, with one-tenth in the other tenure category where it seems highly likely that dwellings are also rented (Table 2.11).

The great majority of primary families in housing stress from overcrowding (77 per cent) are in rented dwellings, with the remainder divided equally between the other tenure categories. For other adults, housing need is distributed roughly in proportion to their distribution between tenure categories with, again, some over-representation in the residual tenure category associated with improvised dwellings.

Figure 2.7. Per cent of elementary families in housing need by landlord of tenant.



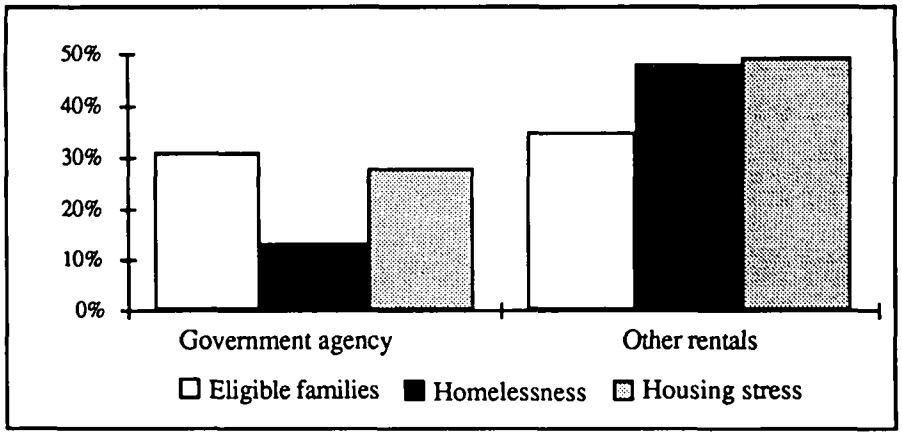
Source: Table 2.12.

The breakdown of renters by tenure type (Figure 2.7, and Table 2.12 at the end of this section) shows that Aboriginal and Torres Strait Islander tenants of State and Territory housing authorities and other government agencies are less likely to be overcrowded than those in other forms of rented accommodation. In particular, there are fewer homeless families sharing overcrowded dwellings in government housing than in other rented accommodation. In the government rental sector, 3.4 per cent (610) of the 18,129 elementary families are assessed as being homeless, compared with 11.0 per cent (2,270) of the 20,587 families in other rented housing. Government housing is also more likely to be an adequate size for elementary primary families than other rental housing, although a

significant proportion are still overcrowded, net of any other residents. An additional 11.5 per cent (2,089) of families in government housing are in housing stress compared with 17.9 per cent (3,687) of those in other rented accommodation (Figure 2.7).

The two-thirds of all indigenous families living in rented housing are divided almost equally between government and non-government housing, 31 and 35 per cent respectively (Figure 2.8). Homelessness and housing stress, however, are more strongly associated with non-government tenure. Almost half of the indigenous families suffering homelessness (48 per cent) or housing stress (49 per cent) are in non-government rented housing, compared to 13 and 28 per cent respectively in government housing.

Figure 2.8. Per cent of elementary families and total bedroom need by landlord of tenant.



Source: Table 2.12.

Boarders and related adults are less common in rented government housing than in the private sector (62 and 65 per cent respectively of these adults are in non-government housing). The proportions in housing need are similar in both types of tenancy, 68 per cent of boarders contributing to overcrowding, while 50 per cent of primary family related adults in government housing and 63 per cent of those in other rented dwellings are overcrowded. Group households also rely heavily on the private rental market, with 82 per cent of these renters, and 62 per cent of all group members, renting privately. Overcrowding, however, is equally likely in either tenancy, 11 per cent of the group members being overcrowded. Taken together, these non-dependent adults in rented housing are distributed 1:2 (24:51 per cent) between government and other rented housing with a similar distribution of housing need (23:51 per cent).

Table 2.11. Summary of population and total housing need by tenure.

Eligible population/ housing need	Family units/persons by tenure Owned	Buying	Renting	Other/Not stated
Eligible population				
Elementary families	6,474	9,776	38,716	3,723
Boarders	385	388	3,102	389
Related adults	1,012	600	11,593	1,825
Group members	388	375	3,916	521
Other adults	a	a	29	141
Family homelessness and bedroom need				
Improvised dwelling	81	22	442	1,142
Second or third family	186	84	2,438	305
Total families	267	106	2,880	1,447
one bedroom household	61	22	497	345
two bedroom household	136	67	1,566	569
three bedroom household	53	11	561	298
four+ bedroom household	17	6	256	235
Total bedroom need	563	214	6,481	3,565
Family housing stress and bedroom need				
Total primary families	618	578	5,776	551
one additional bedroom	440	491	4,000	342
two additional bedrooms	115	72	1,160	136
three additional bedrooms	37	10	384	49
four+ additional bedrooms	26	5	232	24
Total bedroom need	908	687	8,536	864
Other adult housing need				
Improvised dwelling	80	8	444	1,360
Other dwelling	611	378	8,900	823
Total bedroom need	691	386	9,344	2,183
Boarders	162	161	2,096	317
Related adults	467	208	6,781	1,467
Group/other adults	62	18	467	399
Total bedroom need	2,162	1,287	24,361	6,612

a. Confidential.

Source: 1991 Census of Population and Housing.

It should be noted that the non-government rental housing category includes housing purchased by Aboriginal community-based housing associations and rented to community members. Gray (1989) has estimated that about 7,500 houses were purchased between 1971 and 1988 through Commonwealth grants to Aboriginal community organisations. Assuming that housing provision under this program continued at around 500 dwellings per year, there should have been some 9,000 dwellings available for renting at the time of the 1991 Census, about two-fifths of all indigenous dwellings in the non-government rental category.

Table 2.12. Summary of population and total housing need by landlord of tenant.

Eligible population/ housing need	Family units/persons by landlord Housing Commission	Other government agency	Other/Not stated
Eligible population			
Elementary families	15,119	3,010	20,587
Boarders	937	233	1,932
Related adults	3,316	766	7,511
Group members	462	234	3,220
Other adults	4	5	20
Family homelessness and bedroom need			
Improvised dwelling	30	15	397
Second or third family	452	113	1,873
Total families	482	128	2,270
one bedroom household	60	31	406
two bedroom household	337	74	1,155
three bedroom household	67	19	475
four+ bedroom household	18	4	234
Total bedroom need	1,022	255	5,204
Family housing stress and bedroom need			
Total primary families	1,615	474	3,687
one bedroom	1,270	342	2,388
two bedrooms	256	90	814
three bedrooms	59	29	296
four+ bedrooms	30	13	189
Total bedroom need	2,102	664	5,770
Other adult housing need			
Improvised dwelling	32	10	402
Other dwelling	2,293	578	6,029
Total bedroom need	2,325	588	6,431
Boarders	634	156	1,306
Related adults	1,634	404	4,743
Group/other adults	57	28	382
Total bedroom need	5,449	1,507	17,405

Source: 1991 Census of Population and Housing.

Regional variations in overcrowding

The results in this section examine the variations in housing need, assessed on the basis of overcrowding, between States and Territories and between the 36 ATSIC regional council areas. Further, since the housing need of Torres Strait Islanders are largely confined to particular regional council areas in New South Wales, Queensland and the Northern Territory, the separate housing need of Torres Strait Islander people in these areas is

assessed. The summary tables and figures used throughout are derived from the more detailed tables included at the end of each section.

State and Territory housing need

Table 2.13 shows the percentage distribution of Aboriginal and Torres Strait Islander elementary families, boarders, related adults and other non-dependent adults between States and Territories. A majority of the indigenous population is resident in two States, with New South Wales having 29 per cent of families and 23 per cent of non-dependent adults and Queensland having 26 and 28 per cent respectively. Western Australia, with 14 per cent of families and 16 per cent of adults, and the Northern Territory, with 12 and 20 per cent respectively, have most of the remaining population.

Table 2.13. Per cent of eligible population by State/Territory.

State/Territory	Elementary families	Boarders	Non-dependent adults: Related adults	Non-dependent adults: Other adults	Total
New South Wales	29.2	24.9	18.9	29.8	22.6
Victoria	7.3	5.8	3.5	10.4	5.5
Queensland	25.9	30.6	28.7	24.8	28.1
South Australia	6.1	4.8	5.7	6.8	5.8
Western Australia	13.9	16.1	17.3	13.2	16.1
Tasmania	4.7	1.4	0.9	2.9	1.5
Northern Territory	12.2	15.6	24.8	10.6	19.8
Australian Capital Territory	0.8	0.8	0.3	1.4	0.8
Total (Per cent)	100.1	100.0	100.1	99.9	100.0
(Number)	(58,689)	(4,264)	(15,030)	(6,171)	(25,465)

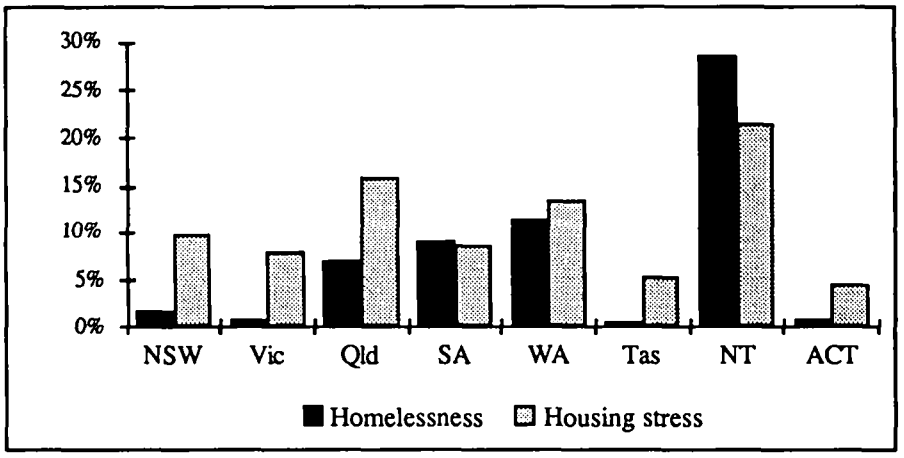
Source: Table 2.14.

The distribution of non-dependent adults between States and Territories is broadly similar to that of elementary families, with some variations. Boarders and related adults, who share family dwellings, are relatively more common in Queensland, Western Australia and, particularly, the Northern Territory, suggesting that overcrowding is more likely to occur in these areas. Conversely, these adults are underrepresented in Victoria, the Australian Capital Territory and, particularly, Tasmania and overcrowding and the associated housing need should be relatively lower there.

Figure 2.9 shows the proportion of families in housing need in each State and Territory. Nationally, the proportions of families who are either homeless or in housing stress are 8 and 13 per cent respectively. The most noticeable feature is the extent to which families living in the Northern

Territory suffer a significantly higher degree of housing disadvantage than elsewhere. More than one in four (29 per cent) of the Northern Territory's indigenous families are homeless, either living in improvised dwellings or sharing overcrowded multi-family housing, and a further 22 per cent are primary families in housing stress, their dwellings having fewer bedrooms than they need.

Figure 2.9. Per cent of elementary families in housing need by State/Territory.



Source: Table 2.14.

Western Australia, South Australia and Queensland also have high proportions of homeless families, 12, 9 and 7 per cent respectively, with relatively few homeless families elsewhere; less than 2 per cent of families in New South Wales, and only 36, 17 and three families respectively in Victoria, Tasmania and the Australian Capital Territory are homeless. Queensland and Western Australia also have a high proportion of families in housing stress, 16 and 13 per cent respectively, in comparison to other States.

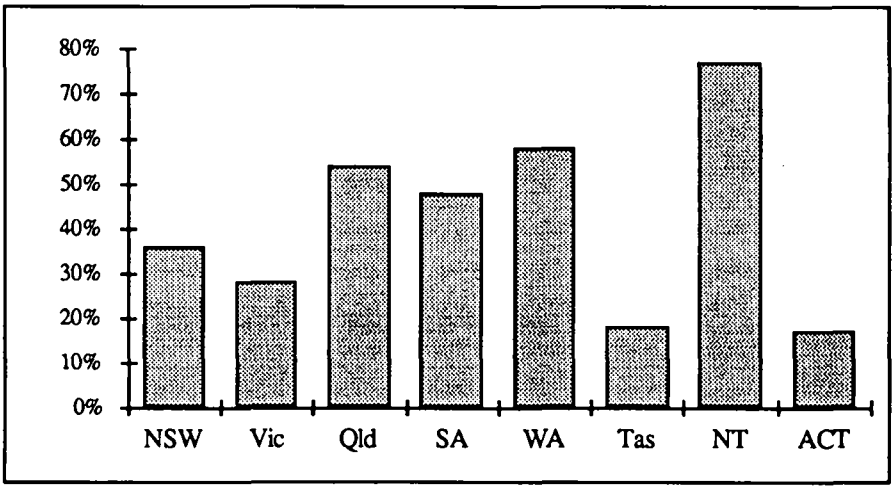
In summary, half of the families in the Northern Territory, almost one-quarter of the families in Western Australia and Queensland and about one-sixth of those in South Australia are either homeless or in housing stress from overcrowding. New South Wales and Victoria have similar proportions to South Australia of families in housing stress but substantially lower proportions of homeless families and thus a lower level of housing disadvantage. Tasmania and the Australian Capital Territory have similar patterns of housing need, with the lowest proportion of families in housing stress and very little homelessness.

This pattern of housing disadvantage is reflected in the housing need of boarders, related and other adults (Figure 2.10). In the Northern

Territory, three-quarters of these adults are in housing need compard with about half of those in Western Australia, Queensland and South Australia. Adults in New South Wales and Victoria have lower proportions in housing need, 36 and 28 per cent respectively, with those in Tasmania and the Australian Capital Territory the least in need.

When the housing need of these adults is distributed between States and Territories, the Northern Territory and Queensland each account for 29 per cent of the total, with 18 per cent in Western Australia, 15 per cent in New South Wales, 5 per cent in South Australia and 3 per cent in Victoria (Table 2.14).

Figure 2.10. Per cent of other adults in housing need by State/ Territory.



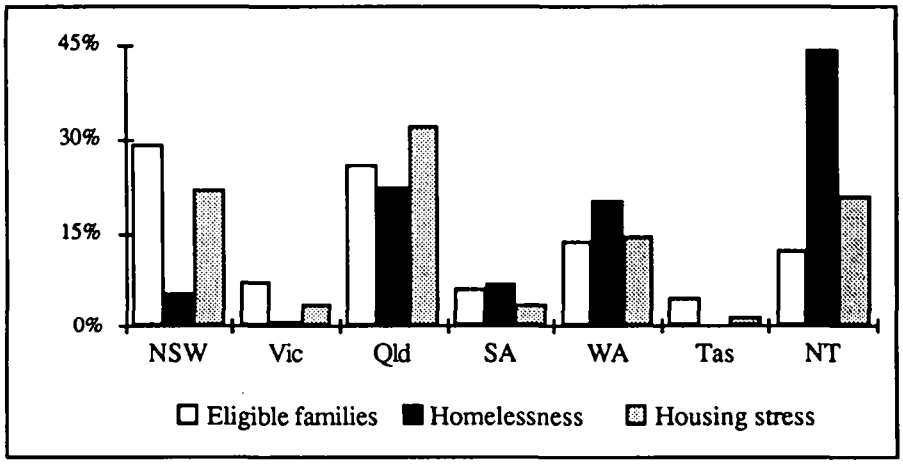
Source: Table 2.14.

Figure 2.11 compares the distribution of families between States and Territories with the distribution of homeless families and families in housing stress. The Australian Capital Territory, which includes less than 1 per cent of indigenous families and an even smaller proportion of the families in housing need, is excluded. Almost half (44 per cent) of all homeless indigenous families live in the Northern Territory, and one-fifth live in Western Australia. New South Wales, which has 29 per cent of the family population, has only 6 per cent of homeless families. Queensland and South Australia have proportions similar to their family populations, 22 and 7 per cent respectively.

The distribution of families in housing stress from overcrowding follows more closely the population distribution between States. Queensland has the highest number, one-third of the total, and the Northern Territory also has more than its share, just over one-fifth, almost as many

families as in New South Wales. Western Australia has 15 per cent of these families, with the remaining 10 per cent shared between Victoria, South Australia and Tasmania.

Figure 2.11. Per cent of families and family housing need by State/Territory.



Source: Table 2.14.

Combining the bedroom need of homeless families, families in housing stress and other adult housing need into a single index of housing need shows the Northern Territory with almost one-third (32 per cent) of the total national requirement. One-quarter of that need is associated with families and other adults living in improvised dwellings. Western Australian indigenous people also have a relatively high level of housing disadvantage, with 18 per cent of the total bedroom need in that State, one-quarter of which is again associated with improvised dwellings. Queensland accounts for 28 per cent of the total bedroom need, more than twice that of New South Wales (14 per cent) which has a similar sized indigenous population. South Australia has 5 per cent of the total need, one-third of which results from improvised dwellings. Indigenous people living in Victoria, Tasmania and the Australian Capital Territory are the least likely to be in housing need (Table 2.14).

Table 2.14. Summary of population and total housing need by State/Territory.

Eligible population/ housing need	Family units/persons by State/Territory							
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT
Eligible population								
Elementary families	17,142	4,276	15,206	3,564	8,150	2,739	7,153	459
Boarders	1,062	248	1,303	206	688	61	664	32
Related adults	2,843	520	4,316	852	2,604	130	3723	42
Group members	1,571	557	1,255	318	683	166	567	83
Other adults	270	87	274	102	134	14	87	3
Family homelessness and bedroom need								
Improvised dwelling	30	a	289	170	399	a	792	0
Second and third family	262	36	753	150	541	17	1,258	3
Total families	292	36	1,042	320	940	17	2,050	3
one bedroom household	46	6	153	57	175	4	482	3
two bedroom household	201	24	581	167	467	13	885	a
three bedroom household	33	6	209	61	191	a	422	a
four+ bedroom household	12	0	99	35	107	a	261	a
Total bedroom need	601	72	2,403	741	2,189	31	4,782	4
Family housing stress and bedroom need								
Total families	1,677	334	2,399	307	1,092	146	1,547	21
one bedroom	1,347	291	1,633	231	772	126	857	21
two bedrooms	255	33	513	56	206	20	398	a
three bedrooms	56	7	156	11	68	a	179	a
four+ bedrooms	19	3	97	9	46	a	113	a
Total bedroom need	2,103	393	3,586	415	1,599	168	2,704	27
Other adult housing need								
Improvised dwelling	49	5	358	161	454	5	860	0
Other dwelling	2,016	396	3,524	543	1,924	61	3,004	27
Total bedroom need	2,065	401	3,882	704	2,378	66	3,864	27
Boarders	567	112	876	108	475	22	563	15
Related adults	1,085	166	2,558	467	1,621	24	2,996	5
Group/other adults	413	123	448	129	284	20	305	8
Total bedroom need	4,769	866	9,871	1,860	6,166	265	11,350	58

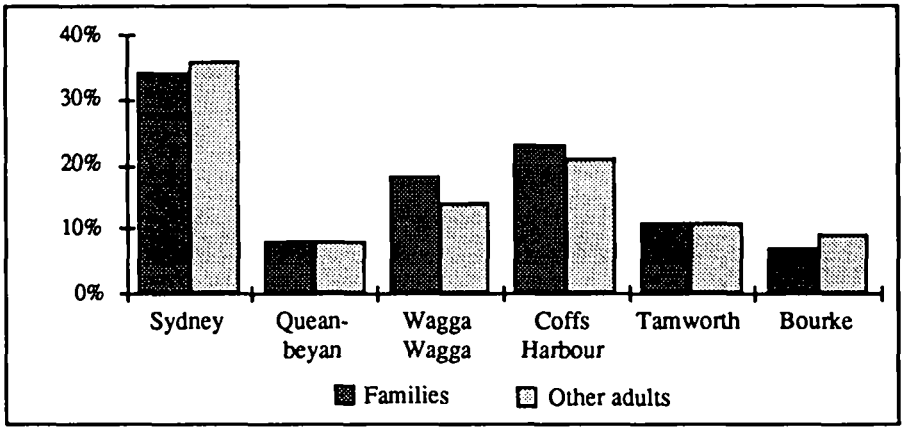
a. Confidential.

Source: 1991 Census of Population and Housing.

Regional councils, New South Wales

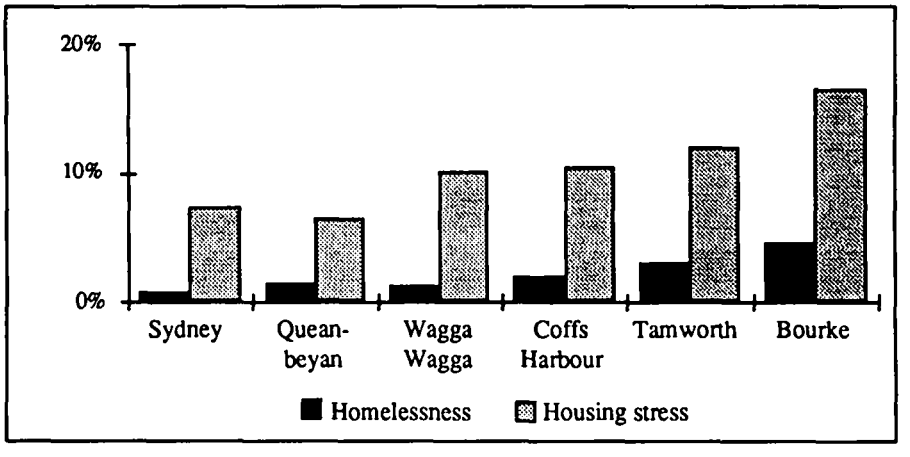
New South Wales is divided into six ATSIC regional council areas, with the Australian Capital Territory included in the Queanbeyan regional council area. In terms of population, Sydney is the largest with just over one-third of families and other adults (Figure 2.12). Coffs Harbour includes just over one-fifth of the State population, with about one-sixth in Wagga Wagga. The remaining population is divided roughly equally between Tamworth, Bourke and Queanbeyan, Tamworth being the largest.

Figure 2.12. Per cent of eligible population by regional council, New South Wales.



Source: Table 2.16.

Figure 2.13. Per cent of families in housing need by regional council, New South Wales.



Source: Table 2.16.

Housing need in these regions is lowest in the major urban centres and increases as council areas become more rural and remote (Figure 2.13). In Sydney, less than 1 per cent of families are homeless and 7 per cent are in housing stress. Queanbeyan has a slightly higher proportion of homeless families and a similar proportion in housing stress. Homelessness remains low in Wagga Wagga and Coffs Harbour, but housing stress is more common, experienced by one in ten families in each area. A further increase in both measures occurs in Tamworth and again in Bourke. The housing need of other adults also follows this pattern, increasing from

about one in four of those in Sydney and Queanbeyan to around 35 per cent in Wagga Wagga and Coffs Harbour and to about one in two in Tamworth and Bourke (Table 2.16).

Table 2.15. Distribution of Torres Strait Islanders and total bedroom need by regional council, New South Wales.

Regional council	Eligible families	Other adults	Total bedroom need
Sydney	544	172	96
Queanbeyan	94	22	6
Wagga Wagga	183	41	12
Coffs Harbour	408	65	50
Tamworth	75	14	4
Bourke	18	4	5
Total	1,322	318	173

Source: 1991 Census of Population and Housing.

Table 2.16. Summary of population and total housing need by regional council, New South Wales.

Eligible population/ housing need	Family units/persons by regional council					
	Sydney	Queanbeyan	Wagga Wagga	Coffs Harbour	Tamworth	Bourke
Eligible population						
Elementary families	5,924	1,436	3,121	3,964	1,925	1,231
Boarders	368	77	166	232	139	112
Related adults	801	221	439	638	412	374
Group/other adults	981	168	240	354	111	73
Family homelessness and bedroom need						
Total families	48	20	38	74	58	57
Total bedroom need	89	40	74	155	130	117
Family housing stress and bedroom need						
Total families	438	93	316	416	231	204
Total bedroom need	500	113	408	520	308	281
Other adult housing need						
Boarders	177	37	89	117	85	76
Related adults	250	56	145	269	189	181
Group/other adults	198	22	54	84	35	27
Total bedroom need	626	115	288	470	309	284
Total bedroom need	1,215	268	770	1145	747	682

Source: 1991 Census of Population and Housing.

The total bedroom need summarises these patterns, taking account of the population distribution and the housing need in each area, although it does apply equal weight to family homelessness and housing stress and other adults housing need. On this basis, about one-quarter of the total housing need occurs in both Sydney and Coffs Harbour, about 15 per cent in Wagga Wagga, Tamworth and Bourke, with the remaining 5 per cent in Queanbeyan (Table 2.16).

The Torres Strait Islander population of New South Wales is concentrated in the three most populous regions, Sydney, Coffs Harbour and Wagga Wagga (Table 2.15). There are 1,322 families (defined as any family with a Torres Strait Islander parent present) representing 7.5 per cent of all indigenous families in the State, and a further 318 adults, 5.4 per cent of the State total. Housing need is somewhat lower among this group than among Aboriginal people, with a total bedroom need of just 173 bedrooms, 3.6 per cent of the State housing need assessment.

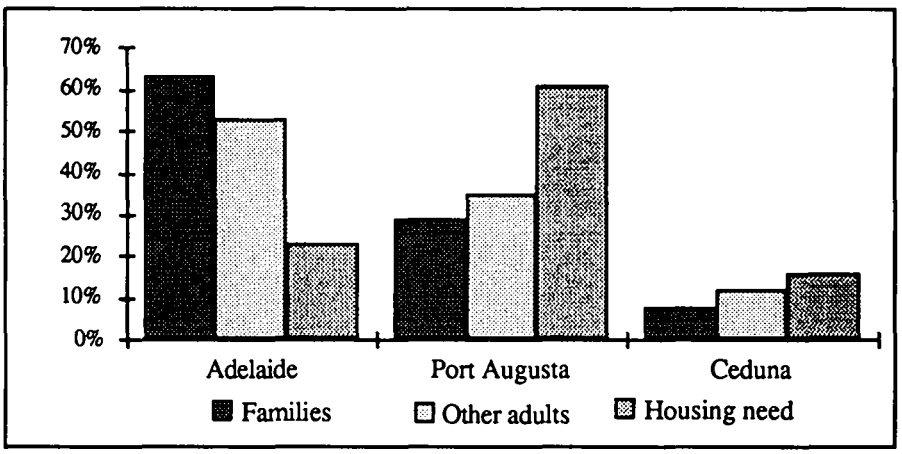
Regional councils, Victoria, South Australia and Tasmania

Victoria is divided into two regional council areas of almost identical population size and housing need (Table 2.18). Wangaratta and Ballarat council areas each have 18 homeless families, with 8 per cent of the families in each region in housing stress and 26 and 32 per cent, respectively, of other adults in housing need. Tasmania is covered by one regional council, Hobart, with the State population distribution and housing need shown previously in Table 2.13. Only the Torres Strait Islander results are discussed here (see Table 2.17).

South Australia has three regional council areas, the majority of the Aboriginal and Torres Strait Islander population living in Adelaide, about one-third in Port Augusta and one-tenth in Ceduna (Figure 2.14). Between the three regions, however, there is a very significant variation in housing need. Relatively few families in Adelaide are homeless, just over 1 per cent, compared to one-sixth of those in Ceduna and one-quarter of those in Port Augusta. In both of these regions, homelessness is strongly associated with families living in improvised dwellings. In Ceduna, 39 of the 47 homeless families live in improvised dwellings while in Port Augusta, 131 families (13 per cent) are in improvised dwellings and a further 113 families (11 per cent) share overcrowded multi-family housing (Table 2.18).

The proportion of families in housing stress is also lower in Adelaide than in the other two areas: 6 per cent, compared to 11 and 14 per cent respectively in Ceduna and Port Augusta. Other adults housing need is also much lower in the metropolitan region. In Adelaide, just over one in four non-dependent adults contribute to overcrowding and are in housing need, compared to around 70 per cent of those in the other two regions. Almost half of these adults in Ceduna and about one-quarter in Port Augusta are in improvised dwellings (64 and 96 adults respectively).

Figure 2.14. Per cent of eligible population and total bedroom need by regional council, South Australia.



Source: Table 2.18.

With this pattern of housing need, the distribution of total bedroom need between the three areas is, not surprisingly, very different from the population distribution. As shown in Figure 2.14, about one-quarter of the total bedroom need is the result of overcrowding in the Adelaide area where the majority of the population reside, compared with two-thirds in the Port Augusta area associated with a population half the size. Ceduna, with about one-tenth of the State population, is responsible for one-sixth of the total bedroom need.

Table 2.17. Distribution of Torres Strait Islanders and total bedroom need by regional council, Victoria, Tasmania and South Australia.

Regional council	Eligible families	Other adults	Total bedroom need
Wangaratta	380	110	41
Ballarat	360	67	37
Hobart	377	45	44
Adelaide	390	51	23
Port Augusta	24	4	3
Ceduna	7	a	a

a. Confidential.

Source: 1991 Census of Population and Housing.

The distribution of Torres Strait Islanders in these three States is shown in Table 2.17. In Victoria, this analysis identifies 740 eligible Torres Strait

Islander families and 177 other adults, 17 and 13 per cent respectively of the eligible indigenous population. As in New South Wales, housing need is lower among this group than among Aboriginal people, with a total need of just 78 bedrooms, 9 per cent of the State total requirement of 866 bedrooms. Tasmania has 377 families and 45 other adults of Torres Strait Islander origin, about one-seventh of the indigenous population, with a housing need of 44 bedrooms or one-sixth of the total State requirement. In South Australia, 421 of the indigenous families (12 per cent) and around 55 adults (4 per cent) are Torres Strait Islander, almost all of them living in the Adelaide area. Overcrowding does not seem to be a problem, housing need being just 26 bedrooms.

Table 2.18. Summary of population and total housing need by regional council, Victoria and South Australia.

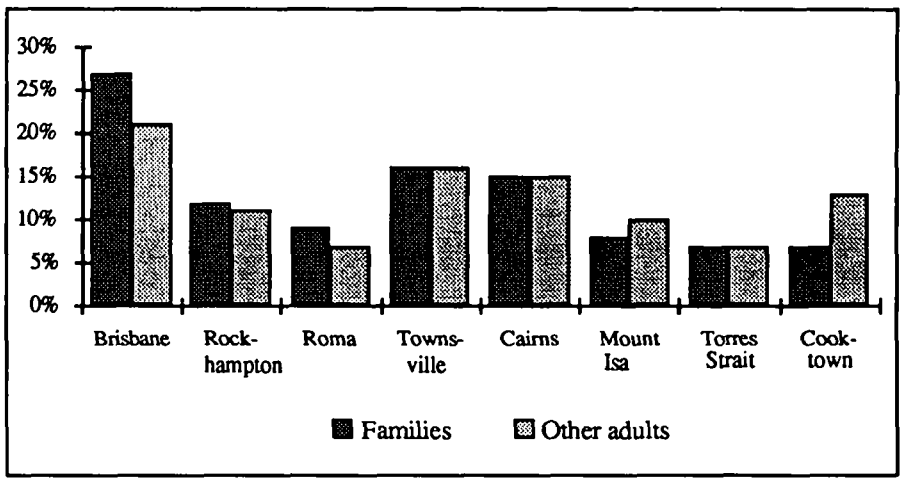
Eligible population/ housing need	Family units/persons by regional council				
	Wangaratta	Ballarat	Adelaide	Ceduna	Port Augusta
Eligible population					
Elementary families	2,139	2,137	2,245	288	1,031
Boarders	126	122	134	14	58
Related adults	270	250	344	137	371
Other adults	354	290	298	27	95
Family homelessness and bedroom need					
Improvised dwelling	a	a	a	39	131
Second or third family	a	a	a	8	113
Total families	18	18	29	47	244
Total bedroom need	34	38	58	126	557
Family housing stress and bedroom need					
Total families	161	173	133	32	142
Total bedroom need	182	211	155	37	223
Other adult housing need					
Improvised dwelling	a	a	a	64	96
Other dwelling	a	a	a	67	265
Total bedroom need	192	209	211	131	361
Boarders	55	57	58	9	41
Related adults	91	75	98	108	262
Group/other adults	46	77	56	15	58
Total bedroom need	408	458	424	294	1,141

a. Confidential.

Source: 1991 Census of Population and Housing.

Regional councils, Queensland
Queensland is subdivided into eight regional council areas, the largest being Brisbane with around one-quarter of the Aboriginal and Torres Strait Islander population. Townsville and Cairns each include about 15 per cent of the population, Rockhampton about 12 per cent, with the four other regions each including about 7-9 per cent of the population (Figure 2.15 and Table 2.21).

Figure 2.15. Per cent of eligible population by regional council, Queensland.



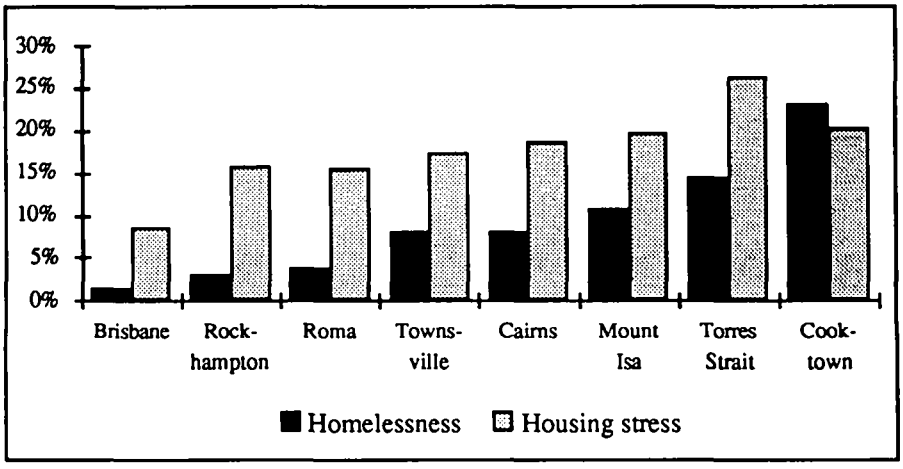
Source: Table 2.21.

Here again, as in New South Wales, housing need increases from the south to the north of the State, from the metropolitan region of Brisbane through the more urbanised areas in the south and on the coast to the rural and remote communities of Mount Isa, Torres Strait and Cooktown. In Brisbane, just over 1 per cent of families are homeless and one in twelve families are in housing stress, compared to the statewide levels of 7 and 16 per cent respectively. In Rockhampton and Roma, homelessness increases to 3-4 per cent and almost one in six families are in housing stress. Further north in Townsville and Cairns, 8 per cent of families are homeless and a little less than one in five families need larger housing, with a slightly higher rate of housing need in Mount Isa. Torres Strait, with 15 per cent homeless and a further 26 per cent in housing stress, and Cooktown, with almost one in four families homeless, have the highest levels of housing disadvantage in the State (Figure 2.16).

More than half (54 per cent) of indigenous adults in the State are assessed as being in housing need, the variation between regions following the pattern of family housing need. In Brisbane, 30 per cent of these adults

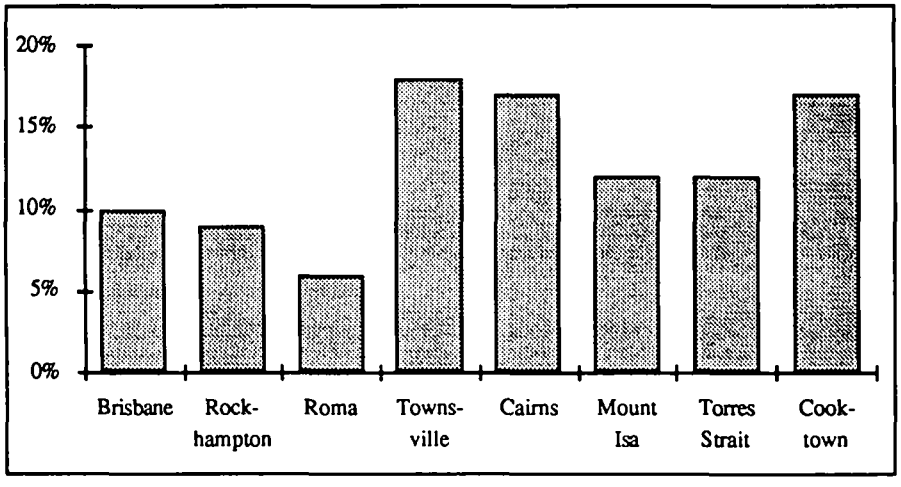
need accommodation, compared to about half in Rockhampton and Roma, almost three-fifths (58 per cent) in Townsville and Cairns, and from 65 to 73 per cent in the more remote regions (Table 2.21).

Figure. 2.16. Per cent of families in housing need by regional council, Queensland.



Source: Table 2.21.

Figure 2.17. Per cent of total bedroom need by regional council, Queensland.



Source: Table 2.21.

Again using total bedroom need as an indicator of housing need in each region, Townsville, Cairns and Cooktown account for about half (52

per cent) of the total with almost equal requirements in each case. Roma has just 6 per cent of the total bedroom need, with the remainder divided almost evenly between Brisbane (10 per cent), Rockhampton (9 per cent), Mount Isa (12 per cent) and Torres Strait (12 per cent) (Figure 2.17).

The housing need associated with families and other adults in improvised dwellings is shown in Table 2.19. About one-third of the people in improvised dwellings living in Townsville with another three-fifths distributed across the other four northern regions. Improvised dwellings account for one-half of the homeless families in Townsville, one-third of those in Cairns and Mount Isa and around one-fifth of those in Torres Strait and Cooktown. Similarly, adults in improvised dwellings are one-fifth of other adult housing need in Townsville and one-tenth in the other four areas. The lesser impact of improvised housing in the regions where, as Figure 2.16 shows, housing disadvantage is highest, emphasises the extent of overcrowding in non-improvised family housing in Torres Strait and Cooktown.

Table 2.19. Distribution of families and other adults in improvised dwellings and associated bedroom need by regional council, Queensland.

Regional council	Families	Other adults	Bedroom need
Brisbane	4	0	6
Rockhampton	8	9	26
Roma	12	9	36
Townsville	95	133	388
Cairns	63	53	203
Mount Isa	38	58	163
Torres Strait	32	26	122
Cooktown	37	70	182
Total	289	358	1,126

Source: 1991 Census of Population and Housing.

Table 2.20 shows the distribution of Torres Strait Islander families and other adults by region, and their total bedroom need. Torres Strait Islander people represent about one-fifth of the indigenous population in the State, with 3,303 elementary families (22 per cent) and 1,228 other adults (17 per cent). The largest concentration, about one-third of the total, lives in the Torres Strait region where the population is almost entirely Torres Strait Islander people: only 27 families and 22 other adults are Aboriginal people. There are also substantial populations in Townsville, Cairns and Brisbane, and smaller populations in Rockhampton and

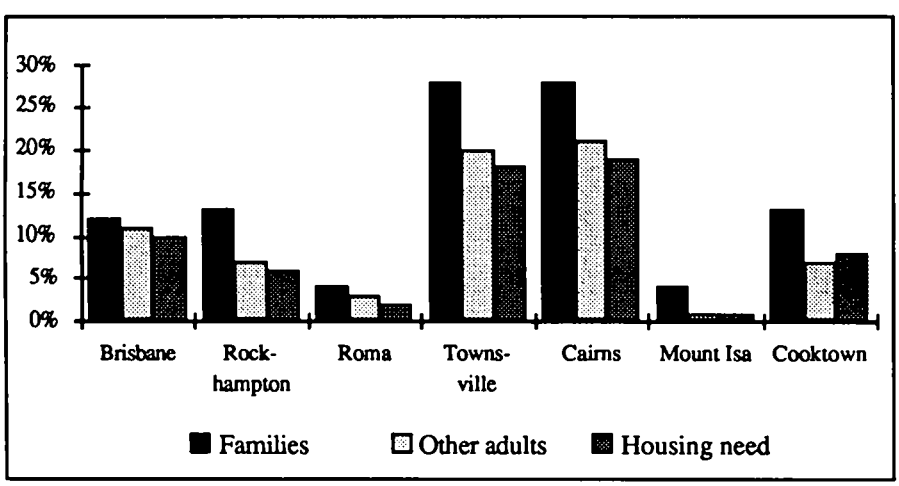
Cooktown. Mount Isa and Roma have very small populations and there is very little Torres Strait Islander housing need in these areas.

Table 2.20. Distribution of Torres Strait Islanders and total bedroom need by regional council, Queensland.

Regional council	Eligible families	Other adults	Total bedroom need
Brisbane	489	166	101
Rockhampton	230	50	57
Roma	63	14	14
Townsville	655	231	314
Cairns	646	221	318
Mount Isa	50	8	12
Torres Strait	1,035	473	1,135
Cooktown	646	221	318
Total	3,303	1,228	2,076

Source: 1991 Census of Population and Housing.

Figure 2.18. Torres Strait Islander proportion of indigenous population and housing need by regional council, Queensland (excluding Torres Strait regional council).



Source: Table 2.20.

Table 2.21. Summary of population and total housing need by regional council, Queensland.

Eligible population/ housing need	Brisbane	Rockhampton	Roma	Townsville	Cairns	Mount Isa	Torres Strait	Cooktown
Eligible population								
Elementary families	4,097	1,830	1,406	2,369	2,282	1,150	1,062	1,010
Boarders	295	169	102	245	160	144	57	131
Related adults	582	397	291	686	703	478	414	765
Group/other adults	632	187	102	218	197	120	24	49
Family homelessness and bedroom need								
Total families	52	56	53	192	180	122	154	233
Total bedroom need	99	116	115	467	398	275	371	562
Family housing stress and bedroom need								
Total families	347	289	217	410	425	228	280	203
Total bedroom need	438	423	288	600	631	357	466	383
Other adult housing need								
Boarders	128	118	69	182	123	111	45	101
Related adults	202	225	143	412	410	335	265	567
Group/other adults	131	52	15	75	79	66	10	20
Total bedroom need	461	394	227	669	611	512	320	688
Total bedroom need	998	933	630	1,736	1,640	1,144	1,157	1,633

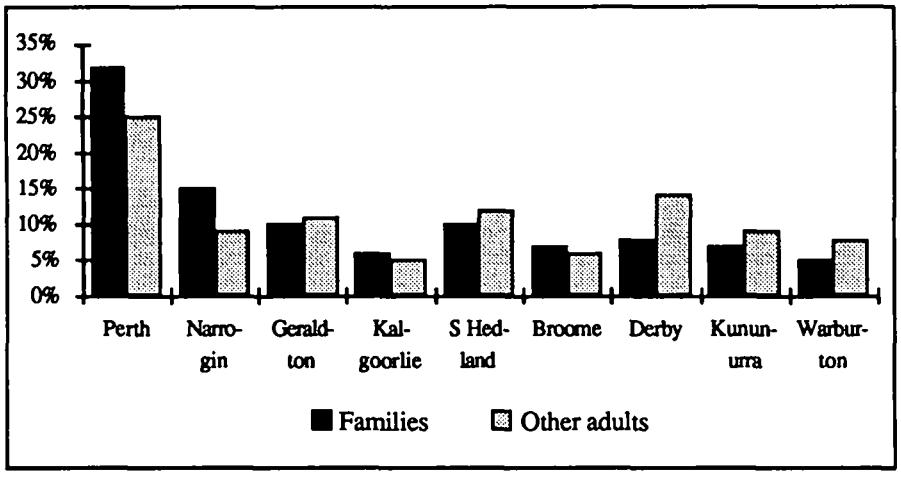
Source: 1991 Census of Population and Housing.

Over the State as a whole, the housing need of Torres Strait Islanders is in proportion to their population: 21 per cent of the total bedroom need is due to overcrowding of Torres Strait Islander families and adults. However, more than half of this total need is concentrated in the Torres Strait region, one of the two most disadvantaged areas in the State. In all other regions, Torres Strait Islander housing need is less than their proportion of the population (Figure 2.18). In Brisbane, Rockhampton and Cooktown, about one in eight of the eligible indigenous families are Torres Strait Islander but their housing need is somewhat lower, representing 10, 6 and 8 per cent respectively of the regions' total. Similarly, in Cairns and Townsville where 28 per cent of indigenous families and 20 per cent of other adults are Torres Strait Islanders, their total bedroom need is 18 and 19 per cent respectively of the regional need.

Regional councils, Western Australia

Western Australia has nine regional councils, the largest being Perth with almost one-third of eligible families and one-quarter of the non-dependent adults. Narrogin includes 15 per cent of families and 10 per cent of other adults, with Geraldton and South Hedland regions each including about 10 per cent of the population. The remaining population, 33 per cent of families and 43 per cent of other adults, are divided about equally between the five remaining regional council areas, although Derby, in particular, has a relatively high percentage of non-dependent adults (Figure 2.19).

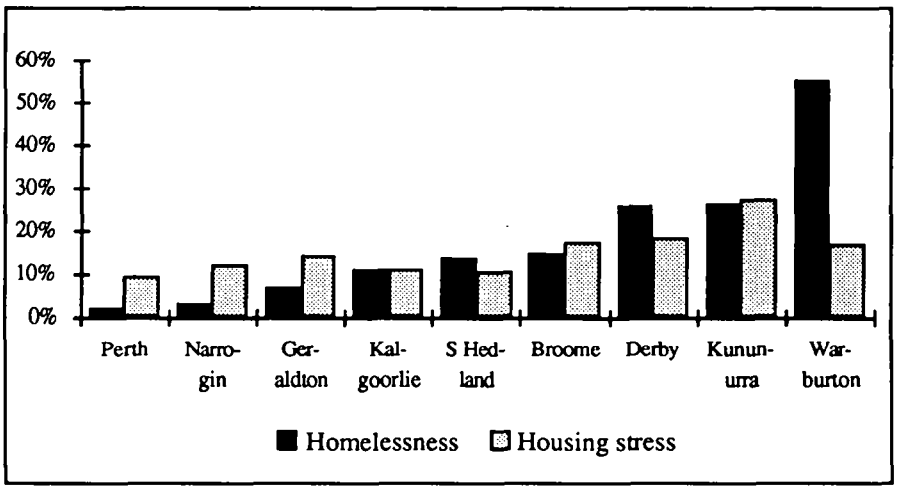
Figure 2.19. Per cent of eligible population by regional council, Western Australia.



Source: Table 2.23.

As in the other States, family housing need is lowest in the metropolitan region of Perth, with increasing housing disadvantage as the regions become more distant from the capital city. In the State as a whole, one in four indigenous families are either homeless (12 per cent) or in housing stress from overcrowding (13 per cent). In Perth, 2 per cent of families are homeless, with slightly higher rates (4 per cent) in Narrogin, covering the south-west corner of the State, and in Geraldton (7 per cent). The level of homelessness is about average for the State in Kalgoorlie, in the south-east, and in South Hedland and Broome in the north-west, increasing to just over one-quarter of families in the northern regions of Derby and Kununurra and to more than half (55 per cent) in the central region of Warburton. There is much less variation across regions in the proportion of families in housing stress, although it is clearly more likely to occur in the more remote regions: Kununurra stands out with more than one in four families in this region needing additional bedrooms (Figure 2.20).

Figure 2.20. Per cent of families in housing need by regional council, Western Australia.



Source: Table 2.23.

Almost three-fifths (58 per cent) of other adults in the State contribute to overcrowding, with lower than average housing need for those in Perth (38 per cent), Narrogin and Geraldton (50 per cent), and considerably higher than average levels of need in Kununurra (79 per cent) and Warburton (86 per cent) (Table 2.23).

The combination of these estimates of housing need to give the total bedroom need in each region indicates a relatively high requirement, about 950 bedrooms or 15 per cent of the total, in each of three smaller regional populations of Derby, Kununurra and Warburton. Perth, with 13 per cent

of the total bedroom need, and Narrogin, with 8 per cent, have low requirements relative to the population in each area, with the housing need in other regional council areas being in proportion to their populations. The few Torres Strait Islanders in the State suffer little housing disadvantage. With 200 families and about 70 other adults in the State, half of them in Perth, the total bedroom need is only around 30 bedrooms.

The contribution of improvised dwellings to total housing need is shown in Table 2.22. Compared to the total bedroom need in each region (Table 2.23), improvised dwellings account for almost two-thirds (63 per cent) of the requirement in Warburton, explaining the high proportion of homeless families and other adult housing need in this area. About one-third of the bedroom need in Kalgoorlie and South Hedland, and one-fifth of the bedroom need in Broome, Derby and Kununurra, is associated with improvised dwellings, with relatively little improvised housing in the other three regions.

Table 2.22. Distribution of families and other adults in improvised dwellings and associated bedroom need by regional council, Western Australia.

Regional council	Families	Other adults	Bedroom need
Perth	a	a	8
Narrogin	a	a	20
Geraldton	14	9	45
Kalgoorlie	30	30	107
South Hedland	51	80	192
Broome	28	23	98
Derby	55	67	185
Kununurra	59	75	230
Warburton	154	165	605
Total	399	454	1,490

a. Confidential.

Source: 1991 Census of Population and Housing.

Regional councils, Northern Territory

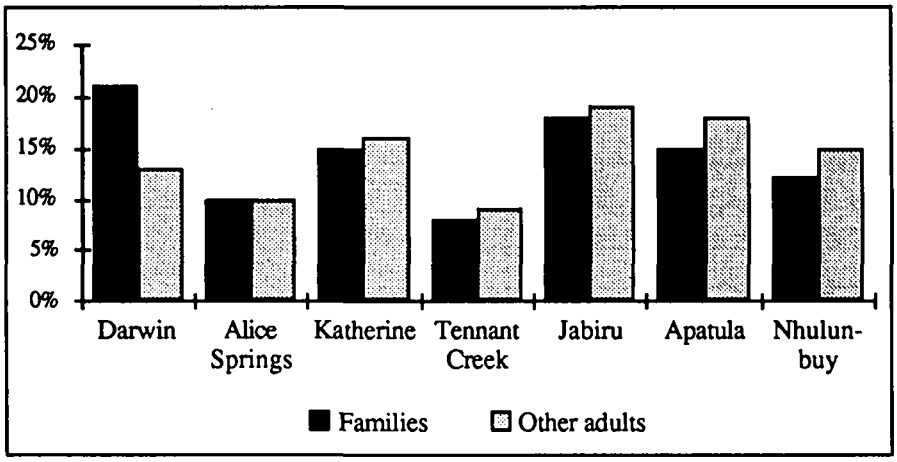
Figure 2.21 shows the population distribution of indigenous families and other adults between the seven regional councils in the Northern Territory. Darwin has the largest family population (21 per cent) but a smaller proportion of other adults. Jabiru includes a little less than one-fifth of the Territory's indigenous population, with about 200 fewer families (15 per cent) in Katherine and Apatula. Nhulunbuy has about one-eighth of the population, Alice Springs one-tenth, and Tennant Creek one-eleventh.

Table 2.23. Summary of population and total housing need by regional council, Western Australia.

Eligible population housing need	Family units/persons by regional council								
	Perth	Narrogin	Geraldton	Kalgoorlie	South Hedland	Broome	Derby	Kununurra	Warburton
Eligible population									
Elementary families	2,592	1,217	852	496	826	569	670	543	385
Boarders	163	62	104	60	87	36	74	64	38
Related adults	518	256	265	106	309	199	429	251	271
Group/other adults	348	70	81	25	106	22	66	65	34
Family homelessness and bedroom need									
Total families	54	43	59	55	113	86	175	142	213
Total bedroom need	109	89	139	128	250	203	370	346	555
Family housing stress and bedroom need									
Total families	243	151	120	55	87	99	124	148	65
Total bedrooms	315	190	156	76	122	144	198	285	113
Other adult housing need									
Boarders	86	39	74	41	70	27	58	44	34
Related adults	229	138	137	60	198	124	289	208	237
Group/other adults	76	16	19	9	54	7	31	46	25
Total bedroom need	391	194	230	110	322	158	378	299	296
Total bedroom need	815	473	525	314	694	505	946	930	964

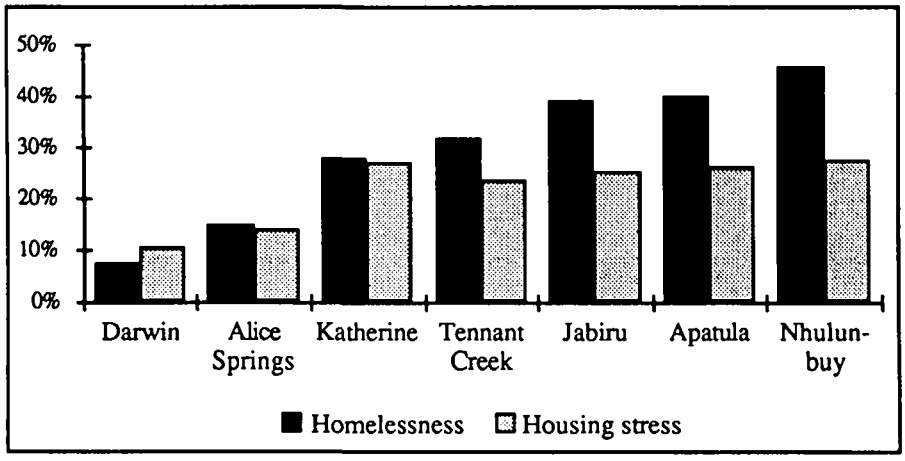
Source: 1991 Census of Population and Housing.

Figure 2.21. Per cent of eligible population by regional council, Northern Territory.



Source: Table 2.25.

Figure 2.22. Per cent of families in housing need by regional council, Northern Territory.



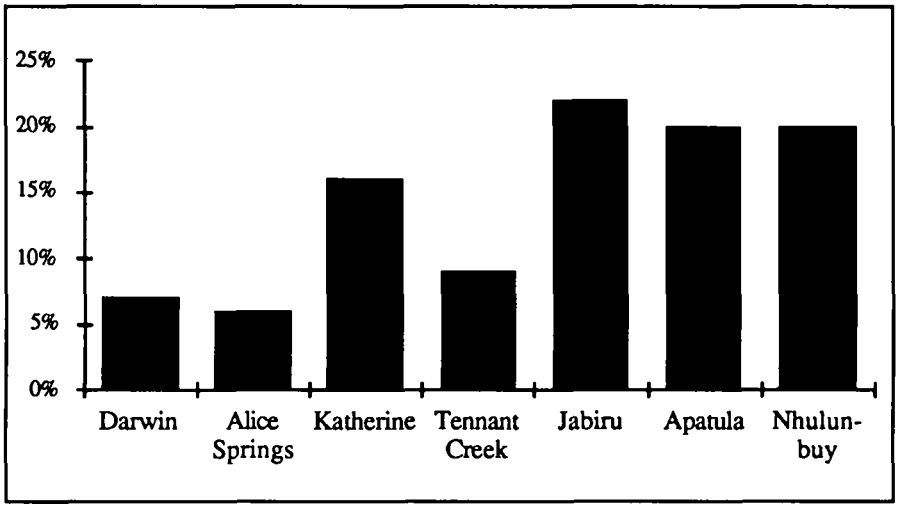
Source: Table 2.25.

As shown in Figure 2.22, families in Darwin and, to a lesser extent, Alice Springs clearly have a much lower level of housing disadvantage than families in the five other regions. In Darwin, 7 per cent of families are homeless and 11 per cent are in housing stress, with twice this level of homelessness and an increase in family housing stress to 14 per cent in Alice Springs. In the five other regions however, the proportion of

homeless families ranges from 28 per cent in Katherine to 46 per cent in Nhulunbuy, with another one-quarter of the families in each area in housing stress from overcrowded dwellings.

The proportion of other adults in housing need, 77 per cent of indigenous adults in the Territory, is lowest in Darwin and Alice Springs where the corresponding proportions are 53 and 63 per cent respectively. In other regions, about four in every five adults are in this category, the worst case again being the Nhulunbuy region with 88 per cent in housing need.

Figure 2.23. Per cent of total bedroom need by regional council, Northern Territory.



Source: Table 2.25.

The 45 per cent of the population in the Jabiru, Apatula and Nhulunbuy council areas thus account for 62 per cent of the total bedroom need in the Territory (Figure 2.23). Katherine and Tennant Creek regional councils account for 16 and 9 per cent respectively, reflecting their proportions of the Territory population, with Alice Springs and Darwin accounting for the remaining 6 and 7 per cent respectively. Almost all Torres Strait Islander people in the Territory live in Darwin, where 121 families and 32 other adults have a total housing need of just 29 bedrooms.

Improvised dwellings are a significant contributor to housing need in the Northern Territory, with just over one-quarter (26 per cent) of the total bedroom need resulting from families and other adults in this form of housing. This pattern varies little across the seven regional council areas (Table 2.24), from 19 per cent in Alice Springs to 31 per cent in Nhulunbuy. The distribution of housing need due to improvised dwellings

by regional council thus parallels that of total housing need (shown in Figure 2.23): Jabiru, Apatula and Nhulunbuy each have a little over 20 per cent of the improvised dwellings, Katherine 15 per cent, Tennant Creek 9 per cent, and Darwin and Alice Springs 7 and 4 per cent respectively.

Table 2.24. Distribution of families and other adults in improvised dwellings and associated bedroom need by regional council, Northern Territory.

Regional council	Families	Other adults	Bedroom need
Darwin	67	85	215
Alice Springs	36	62	131
Katherine	100	166	429
Tennant Creek	77	69	265
Jabiru	167	139	585
Apatula	187	177	628
Nhulunbuy	158	162	701
Total	792	860	2,954

Source: 1991 Census of Population and Housing.

Table 2.25. Summary of population and total housing need by regional council, Northern Territory.

Eligible population/ housing need	Darwin	Alice Springs	Katherine	Tennant Creek	Jabiru	Apatula	Nhulunbuy
Eligible population							
Elementary families	1,527	685	1,076	591	1,286	1,097	891
Boarders	136	101	187	32	128	66	14
Related adults	339	345	478	357	733	766	705
Group/other adults	198	73	146	50	85	83	19
Family homelessness and bedroom need							
Total families	111	102	301	188	502	439	407
Total bedroom need	215	210	662	425	1,200	958	1,112
Family housing stress and bedroom need							
Total families	164	95	293	140	324	287	244
Total bedroom need	206	150	512	215	596	504	521
Other adult housing need							
Boarders	84	77	175	29	120	65	14
Related adults	198	227	410	285	594	652	630
Group/other adults	73	25	98	22	36	44	7
Total bedroom need	355	328	683	336	749	761	651
Total bedroom need	776	688	1,857	976	2,545	2,223	2,284

Source: 1991 Census of Population and Housing.

Summary of total housing need by regional council

To summarise the distribution of housing need across regional council areas, Figure 2.24 shows the total bedroom need in each council area obtained by aggregating the bedroom need of homeless families, families in housing stress and other adults in housing need. The distribution thus reflects a combination of population size and the level and type of housing disadvantage. It also gives equal weight to the needs of the homeless living in improvised dwellings and to those in overcrowded dwellings, although an unequal weighting reflecting priorities could readily be applied to the different types of housing need identified in this assessment.

The seven regions with the highest total housing need, ranging from 1,633 bedrooms in Cooktown to 2,545 bedrooms in Jabiru, account for two-fifths of the total national requirement, 13,918 of the 35,205 bedroom total. This group includes the two largest regional populations in northern Queensland, Townsville and Cairns, the most disadvantaged region (per head of population) in that State, Cooktown, and four of the rural/remote regional populations, roughly equal in size, in the Northern Territory.

The next five regions, with a total bedroom need ranging from 1,141 in Port Augusta to 1,215 in Sydney, account for one-sixth of the total housing need. Port Augusta and the two Queensland regions, Mount Isa and Torres Strait, have similar population sizes, while Coffs Harbour and Sydney are two of the largest regional council populations.

The next six regions, with a bedroom need ranging from 930 to 998 bedrooms, together account for one-sixth of the total requirement, as do the eight regions with a bedroom need ranging from 630 in Roma to 815 in Perth. The first group includes the small, but highly disadvantaged, populations of Tennant Creek in the Northern Territory and Derby, Kununurra and Warburton in Western Australia, and the relatively large and less disadvantaged populations of the mainly urban Brisbane and Rockhampton regions. The second group comprises four regional pairs of similar population size and patterns of housing need: Alice Springs and South Hedland, Roma and Bourke, Tamworth and Darwin, and Wagga Wagga and Perth.

The final group of ten regions, with a housing need of 265 to 525 bedrooms, account for the remaining 11 per cent of the total housing need. These regions have either a relatively low level of housing disadvantage, such as in Hobart, Queanbeyan, Adelaide, Narrogin and the two Victoria regions of Ballarat and Wangaratta, or have small indigenous populations, as in Ceduna and the three Western Australian regions of Kalgoorlie, Broome and Geraldton.

At the national level, the 58,689 elementary families included in this analysis (see Table 2.9) are estimated to require a total of 153,298 bedrooms. This estimate is the sum of the 10,995 bedroom need of primary families in housing stress (Table 2.6), 4,414 bedrooms for 1,687 families in improvised dwellings (Table 2.8), 6,409 bedrooms for 3,013 second and third families in overcrowded multi-family dwellings (Table 2.4) and a

further 896 bedrooms, estimated proportionately, for 421 such families who are not overcrowded, and 130,584 bedrooms currently available to the 53,568 remaining elementary primary families (derived from the census). In addition, there are 25,465 adults each requiring one bedroom (Table 2.9), bringing the total indigenous population bedroom need to 178,763 bedrooms. As shown in Table 2.9, the current supply of Aboriginal and Torres Strait Islander dwellings fails to meet this target by 35,205 bedrooms, a level of unmet need equivalent to 20 per cent of the total requirement.

Figure 2.25 shows the variation in this proportion of unmet housing need between regional councils, indicating the severity of housing disadvantage in each area. Estimates are obtained by dividing the total bedroom need in each region, given in the earlier tables, by a figure which estimates the total bedroom requirement of the indigenous population. This figure is the number of elementary families in each region multiplied by 2.612, the national average bedroom need for such a family (153,298/58,689), added to the number of other adults in that area. While a precise figure could be derived for each region, as outlined above at the national level, this is unlikely to have a significant effect on the general pattern. Comparisons with the patterns of family housing need by regional council within States, shown earlier in Figures 2.13, 2.16, 2.20 and 2.22, confirm this view.

These results again emphasise the severity of housing disadvantage of indigenous people living in the northern and central areas of Australia and the relative advantage of those living in State capital cities and the south-eastern and eastern areas. With the exception of Darwin and Perth, Narrogin and Geraldton, all regions north-west of a line from Adelaide to Rockhampton require additional housing for at least one-fifth of their population. In most of the Northern Territory and in the northernmost parts of Queensland and Western Australia, the level of unmet need is more than double this level. Conversely, regions to the south-east all have levels of unmet housing need below the national average. While concerns about the housing conditions of Aborigines and Torres Strait Islanders living in urban centres are clearly justified, it is still the case that those living in the rural and remote regions are more severely disadvantaged.

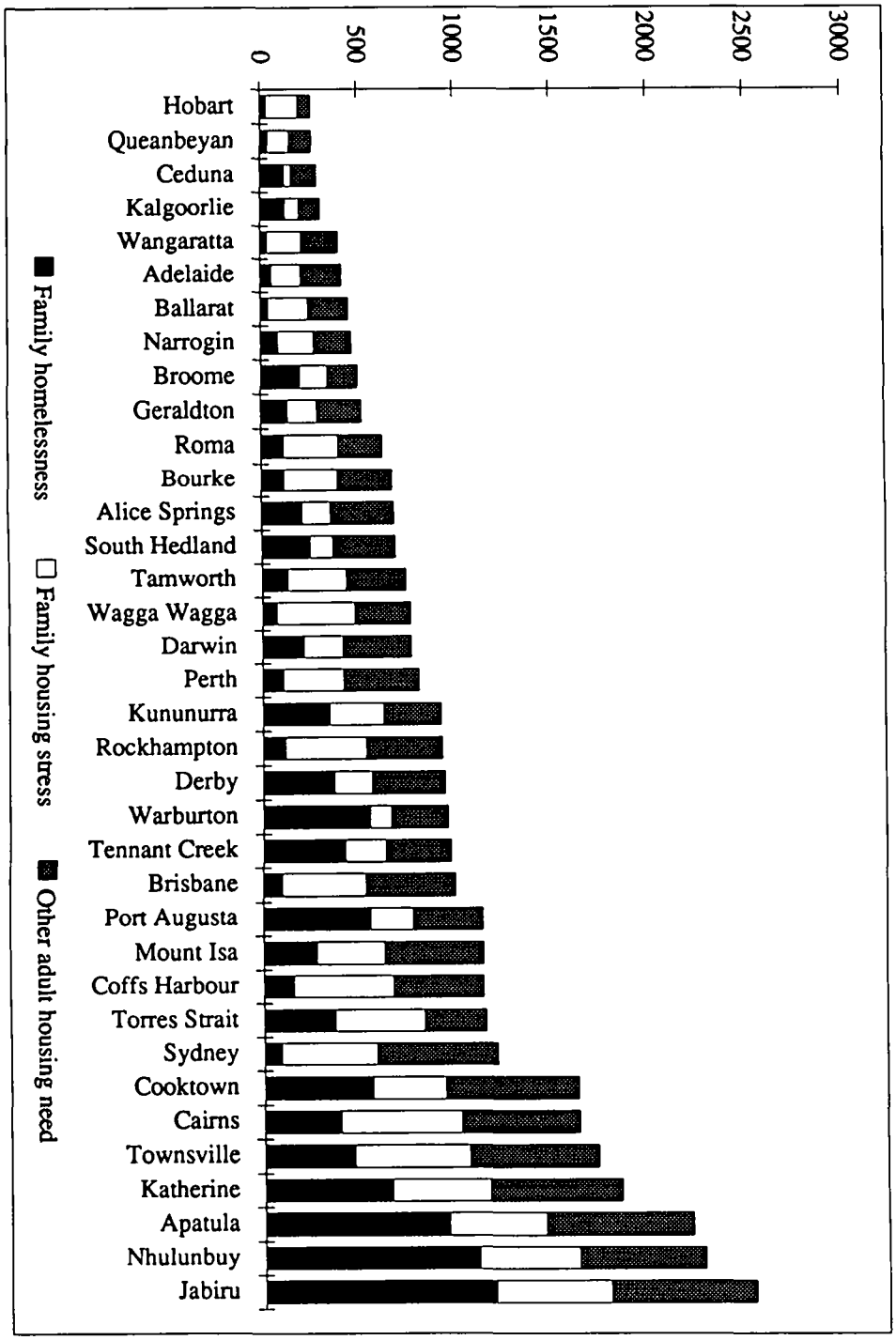
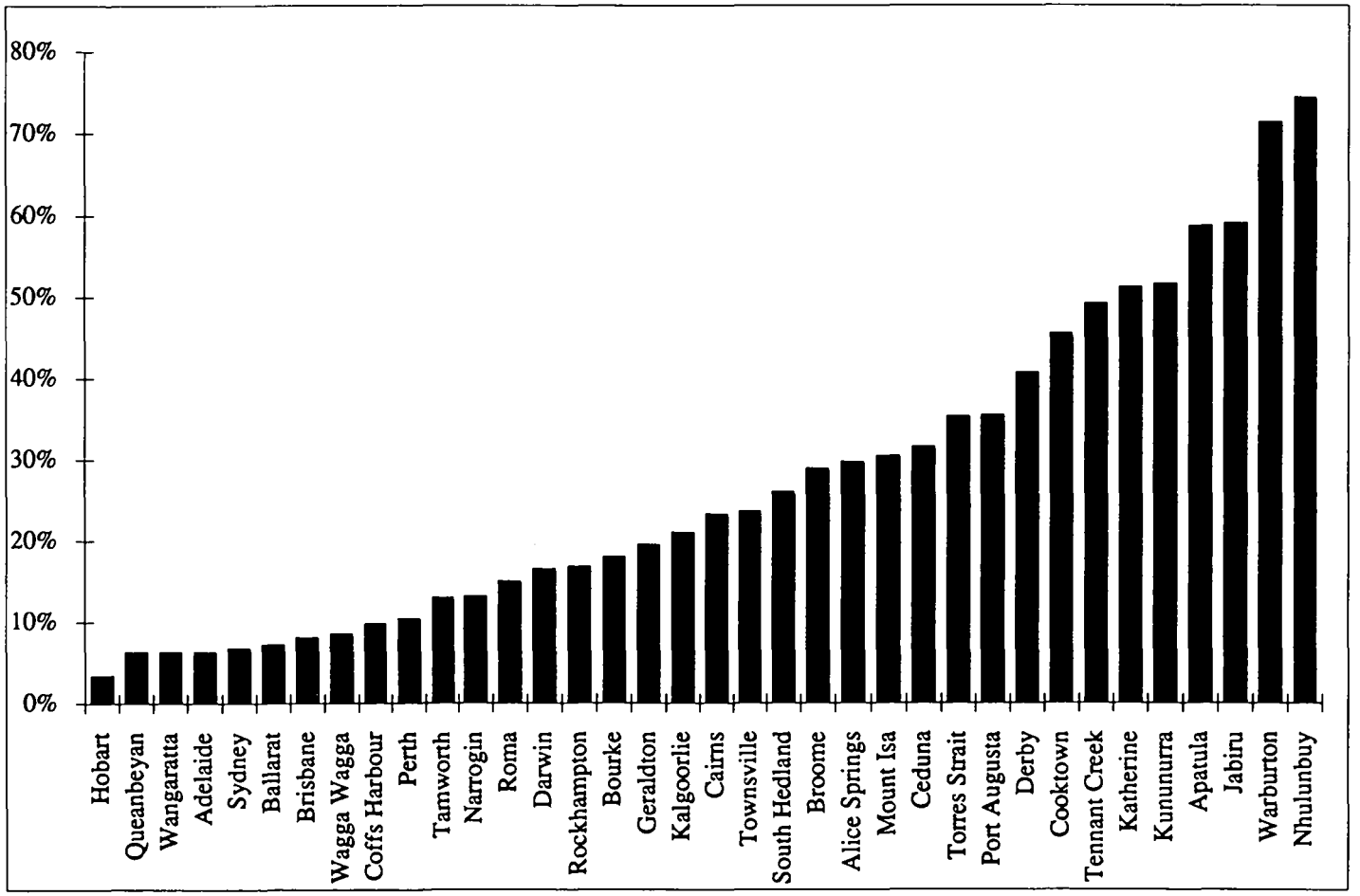


Figure 2.24. Total bedroom need by regional council, Australia.

Figure 2.25. 'Unmet' housing need by regional council (per cent), Australia.



3. Financial housing stress

Measures of financial housing stress are concerned with identifying those households, families or individuals for whom housing costs impose an unreasonable burden on their income. This is usually assessed in one of two ways: first, by the proportion of available income spent on housing being higher than some defined standard (affordability); and second, by the residual income available after meeting housing costs being insufficient to maintain a reasonable standard of living (after-housing poverty). These two types of indicator are discussed in Chapter 1, where it is concluded that ratio measures of housing affordability have a number of limitations. This report therefore uses only one measure of financial housing stress, after-housing poverty.

The methodology to determine households in after-housing poverty (outlined in Chapter 1 and detailed below) requires specification of the after-housing poverty line (AHPL) for each household. The AHPL is a benchmark of the disposable income required to support the needs of the household for other (non-housing) goods and services. This benchmark is then compared with the residual after-tax household income available after deducting housing cost payments. If these payments reduce the disposable household income below the AHPL, the household is said to be in after-housing poverty.

Definition of after-housing poverty

The AHPL is derived for each income unit (family or individual) in the household using the figures in Table 1.5. For the purpose of this analysis, the precise figures given there are rounded up or down to approximate dollar values. The AHPL for a couple is taken to be $150 a week, with values of $90 a week for a single adult and $45 a week for each dependent child. The sum of AHPL values across the members of the household then gives the weekly household AHPL, and multiplication by 52 gives the annual value.

An estimate of after-tax household income is derived by adjusting the individual gross income data given in the census using 1991 tax rates, and summing the results for all income earners in the household. Because the census only records income data in categories, all calculations are based on the income category mid-point values. Thus, each person's pre-tax income code is equated to the corresponding tax adjusted mid-point shown in the final column of Table 3.1, values are aggregated across all members of the household aged 15 years or more, and the household total is regrouped into categories according to the after-tax range. Spouse, dependent and sole parent rebates were considered but make little difference in the context of the broad income categories used in the census and so are ignored.

Table 3.1. Adjusting individual income to after-tax income using 1991 tax rates.

Census code	Pre-tax range ($)	Pre-tax mid-point ($)	After-tax range ($)	Tax adjusted mid-point ($)
1	0-3,000	1,500	0-3,000	1,500
2	3,001-5,000	4,000	3,001-5,000	4,000
3	5,001-8,000	6,500	5,001-7,436	6,236
4	8,001-12,000	10,000	7,437-10,616	9,026
5	12,001-16,000	14,000	10,617-13,796	12,206
6	16,001-20,000	18,000	13,797-16,882	15,386
7	20,001-25,000	22,500	16,883-20,050	18,466
8	25,001-30,000	27,500	20,051-23,125	21,588
9	30,001-35,000	32,500	23,126-26,200	24,663
10	35,001-40,000	37,500	26,201-28,915	27,565
11	40,001-50,000	45,000	28,916-34,265	31,590
12	50,001-60,000	55,000	34,266-39,615	36,940
13/14	>60,000	>60,000	>39,616	>40,000
15/16	not stated		not stated	

The only housing costs recorded in the census are monthly mortgage payments for home buyers and weekly rent for tenants. Both variables are recorded in intervals, weekly rent increasing over 14 categories from less than $48 per week to $498 or more a week and monthly mortgage repayments in 14 categories from less than $201 per month to $1,400 or more a month. A household's housing costs are defined by the mid-point value of the appropriate category converted to the annual value, with home owners allocated zero housing costs. This value is added to the household AHPL value and grouped into the after-tax income categories specified above (Table 3.1) for comparison with after-tax household income.

For Aboriginal or Torres Strait Islander households in non-improvised dwellings, Table 3.2 shows the distributions of their AHPL, AHPL plus housing costs, and after-tax household incomes. Improvised dwellings, and dwellings where the only indigenous residents are visitors, students or dependent children are excluded from this analysis. The 69,211 eligible dwellings are thus indigenous family households (56,687), non-indigenous family households (2,107) or group households (4,200) with one or more indigenous adult residents, or indigenous lone person households (6,217).

The distribution of AHPL is indicative of the distribution of household size. The AHPL is $90 a week or $4,680 a year for a single adult or single parent, $150 a week or $7,800 a year for a couple, and $45 a week or $2,340 a year for a child. A household with an AHPL of less than $5,000 is thus a lone person household, $5,001-$7,436 corresponds to a single parent with one child, $7,437-$10,616 represents a couple without children or with one child, two single adults, or a single parent with two children, and so on.

Table 3.2. Distribution of AHPL, AHPL plus housing costs and after-tax household income: all eligible non-improvised indigenous dwellings.

After-tax income category ($)	AHPL		AHPL plus housing costs		After-tax household income	
	Number	Per cent	Number	Per cent	Number	Per cent
< 5,000	6,375	9.2	986	1.6	879	1.5
5,001-7,436	2,498	3.6	1,539	2.4	2,666	4.7
7,437-10,616	19,188	27.7	8,346	13.2	4,333	7.6
10,617-13,796	11,857	17.1	9,540	15.1	6,333	11.1
13,797-16,882	11,022	15.9	11,119	17.6	5,030	8.8
16,883-20,050	9,161	13.2	11,476	18.2	5,769	10.1
20,051-23,125	2,810	4.1	8,360	13.2	4,372	7.7
23,126-26,200	2,062	3.0	4,417	7.0	4,551	8.0
26,201-28,915	1,558	2.3	2,328	3.7	2,841	5.0
>28,915	2,680	3.9	5,091	8.1	20,223	35.5
Income missing					12,214	
Housing costs missing			6,009			
Total	69,211	100.0	69,211	100.1	69,211	100.0

Source: 1991 Census of Population and Housing.

Two-fifths of indigenous dwellings house a lone adult, small group or family with an AHPL of $10,616 a year or less. A further one-third house, for example, a couple with two or three children, a single parent with three to five children, or other similar combinations of adults and children with a minimum income requirement after housing costs of $10,617-$16,882 a year. The remainder, just over one-quarter of these dwellings, represent larger households equivalent to four or more adults with an after-housing disposable income requirement of more than $16,882 a year, although half of this group have an AHPL in the $16,883-$20,050 income category.

The addition of housing costs to the household AHPL gives the after-tax income required to meet current housing costs without suffering poverty. The distribution is roughly symmetrical about a median income level of $16,880 a year, with almost one-third of households in each of the categories on either side of this central value: 32.7 per cent require income in the range $10,617-$16,882, and 31.4 per cent in the range $16,883-$23,125. At the lower end of the scale, one-sixth (17.2 per cent) of households can meet their current housing costs and other requirements with net incomes of less than $10,617. These are small households with low housing costs, either because of home ownership (zero housing costs) or low, perhaps subsidised, rents. On the other hand, 18.8 per cent of households require an after-tax income of more than $23,120 a year to avoid after-housing poverty, equivalent to a gross income of $30,000 a year or more for a single income household.

The after-tax household income distribution has a higher median value of around $23,000, with more than one-third (35.5 per cent) of households having net incomes above $28,915. There are however substantial numbers of low income households which are likely to suffer poverty: 13.8 per cent have after-tax incomes below $10,616 and one-third (33.7 per cent) have after-tax incomes below $16,882.

A household is said to be in after-housing poverty if its after-tax household income is less than the sum of the household AHPL and its current housing costs. The results of this comparison are shown in Table 3.3, with outcomes classified into six categories. The first category shows households with the most severe level of poverty, those with after-tax household income less than their AHPL. These households lack sufficient income to support a reasonable standard of living even before payment of housing costs. The second category identifies households with income after housing costs below their AHPL, households with excessive housing costs in the sense that income available for other goods and services after payment of housing costs is below the standard set by their AHPL. Together, these two categories of poverty account for 10,520 households, almost one-fifth (19.0 per cent) of the Aboriginal and Torres Strait Islander households in non-improvised dwellings.

This is, for a number of reasons, a conservative estimate of the level of after-housing poverty in Aboriginal and Torres Strait Islander dwellings. First the AHPL used in this analysis assumes that the household head is not in the workforce and is lower than that for a household head in the workforce. Second, housing costs only include mortgage repayments and rent, are set at zero for home owners, and thus are clearly a minimum estimate. Third, there are, as shown in Table 3.3, a further 15.6 per cent of households whose after-tax income is equal to their AHPL plus housing costs, within the income categories allowed by the census data. These households are certainly at risk of poverty and, given other factors, should perhaps be included in the after-housing poverty estimate. Similarly, the category showing 7.4 per cent of households with after-tax incomes strictly below their AHPL excludes any cases where the after-tax income and AHPL categories allowed by census data are equal and thus underestimates the proportion of households at this very low income level.

If half of those households in the category with after-tax income equal to the sum of their AHPL and housing costs are in after-housing poverty, this estimate increases to 14,855 households. Further, since those with housing costs missing fall into this or the adjacent income categories, half of these 1,518 households could be expected to be in after-housing poverty, increasing the number to 15,624. Finally, if those with missing income data are assumed to be distributed proportionately across the income categories, a further 3,350 households would be included, bringing the total number of households in after-housing poverty to almost 19,000 or 27.4 per cent of all Aboriginal and Torres Strait Islander households in non-improvised private dwellings.

Table 3.3. Household income relative to AHPL and AHPL plus housing costs: all eligible non-improvised indigenous dwellings.

Income category	Number	Per cent
After-tax income < AHPL	4,090	7.4
After-tax income < AHPL plus housing costs	6,430	11.6
After-tax income = AHPL plus housing costs	8,669	15.6
After-tax income > AHPL plus housing costs and		
- income before-tax < $20,000	5,308	9.6
- income before tax = $20,001-40,000	16,221	29.2
- income before tax > $40,000	14,762	26.6
Income missing	12,214	
Housing costs missing[a]	1,518	
Total	69,212	100.0

a. Households with housing costs missing and income before tax > $20,000 are assumed not to be in after-housing poverty and allocated to the appropriate income category. These households therefore have income before tax < $20,000 and after-tax income >= AHPL.

Source: 1991 Census of Population and Housing.

Table 3.4. After-housing poverty risk by income level: non-improvised indigenous dwellings with assessable income and housing costs.

Income before tax ($)	All dwellings		Net income <= AHPL plus housing costs		Per cent of all dwellings in income level
	Number	Per cent	Number	Per cent	
<20,001	19,629	35.4	14,321	74.6	73.0
20,001-40,000	20,352	36.7	4,131	21.5	20.3
>40,000	15,499	27.9	737	3.8	4.8
Total	55,480	100.0	19,189	99.9	34.6

Source: 1991 Census of Population and Housing.

As shown in Table 3.4, the great majority, 75 per cent, of all households either in after-housing poverty or just coping on the margin have gross incomes of $20,000 or less per annum, just over one-fifth (21.5 per cent) have incomes ranging from $20,001-40,000, and a relatively small number have household incomes above $40,000 per annum. Looked at in terms of the households at each income level, these figures correspond to almost three-quarters of Aboriginal and Torres Strait Islander households with an income of $20,000 or less either suffering or on the margin of after-housing poverty, compared with one-fifth of those in the $20,001-40,000 income range and one-twentieth of those with higher incomes.

After-housing poverty by tenure and household type

Table 3.5 gives estimates of the number of Aboriginal and Torres Strait Islander households in after-housing poverty by household tenure. For those who own their current dwelling and have no mortgage payments, 4.6 per cent have net incomes strictly lower than their AHPL, and the inclusion of half of those in the category with after-tax income equal to their AHPL brings the estimated proportion in poverty to 8.0 per cent. The proportion of home buyers in poverty before housing costs is somewhat lower at 2.6 per cent, but mortgage repayments leave a further 11.6 per cent with insufficient income to maintain an adequate standard of living.

Among renters, almost two-fifths (38 per cent) of those in government housing and almost one-third (31 per cent) of those renting privately are in after-housing poverty. One in ten of those in government housing have net incomes below their AHPL and a further 28 per cent pay rents which reduce their residual incomes to poverty levels. In comparison, those in other forms of rented housing appear somewhat 'better off', in the sense that a smaller proportion (6.8 per cent) have net incomes below their AHPL or are reduced to poverty by housing costs (24.1 per cent). Community-based Aboriginal housing is a significant proportion of this sector, estimated at about 9,000 dwellings, and would be expected to reduce the level of financial housing stress by the provision of low cost rental dwellings.

Table 3.5. Households in after-housing poverty by tenure.[a]

Tenure	Total households	Income < AHPL		Income < AHPL plus housing costs		Total in after-housing poverty	
		Number	Per cent	Number	Per cent	Number	Per cent
Owned	8,073	374	4.6	276	3.4	650	8.0
Buying	10,950	283	2.6	1,275	11.6	1,558	14.2
Rented							
government	20,556	2,146	10.4	5,670	27.6	7,816	38.0
other	25,064	1,713	6.8	6,032	24.1	7,745	30.9
Other/Not stated	4,568	513	11.2	661	14.5	1,174	25.7
Total	69,211	5,029	7.3	13,914	20.1	18,943	27.4

a. The estimates include households with missing income or housing costs data, which are distributed proportionately across the appropriate income categories as discussed in the text. Half of the households in the category After-tax income = AHPL plus housing costs are assigned to the after-housing poverty category After-tax income < AHPL plus housing costs.

Source: 1991 Census of Population and Housing.

The association between different household types and poverty in each tenure is examined in Tables 3.6 and 3.7. Table 3.6 shows, for each tenure, the proportion of households with after-tax incomes (strictly) below their

AHPL. Group and lone person households are least likely to suffer this level of poverty, just 1-2 per cent having net incomes at this level. In family households, the presence of other adults or families and the associated contribution to household income might be expected to reduce the proportions at poverty levels. This effect is perhaps evident in rented government housing, where 12 per cent of one family households have incomes below their AHPL compared with 9-10 per cent of those who share with other adults or families. In other forms of tenure however, their presence does not appear to reduce poverty and, in non-government rented housing particularly, a higher proportion of multi-family households have incomes below their AHPL.

Table 3.6. Households in poverty before housing costs by tenure and household type.

Tenure and poverty	Household type[a] One family	One family plus adults	Two or more families	Group	Lone adult
Owned					
Income < AHPL-Number	260	56	15	5	38
Per cent	4.9	4.6	5.2	1.5	3.9
Total	5,270	1,206	291	332	974
Buying					
Income < AHPL-Number	239	30	b	b	9
Per cent	2.7	2.4	b	b	1.9
Total	8,725	1,226	176	345	478
Rented: government					
Income < AHPL-Number	1,695	353	67	5	26
Per cent	12.3	8.7	9.8	1.0	1.6
Total	13,749	4,055	681	489	1,582
Rented: other					
Income < AHPL-Number	1,027	417	209	24	36
Per cent	8.0	7.8	12.5	0.9	1.4
Total	12,801	5,325	1,677	2,676	2,585
Other					
Income < AHPL-Number	269	126	76	14	28
Per cent	12.3	13.3	15.9	3.9	4.7
Total	2,188	946	478	358	598
Total					
Income < AHPL-Number	3,490	982	367	48	137
Per cent	8.2	7.7	11.1	1.1	2.2
Total	42,733	12,758	3,303	4,200	6,217

a. A one family household contains an elementary family of parent(s) and offspring only. This differs from the standard census definition of the primary family, which may include other related adults. One family households with related or unrelated adults present and primary families of related adults only are included in the category one family plus adults.

b. Confidential.

Source: 1991 Census of Population and Housing.

The number of households in poverty after housing costs are taken into account (including those in Table 3.6) is shown in Table 3.7. Except in owned dwellings, the view that sharing, and thus overcrowding, plays a role in reducing after-housing poverty levels is now supported. Among renters in particular, the presence of boarders, related adults or a secondary family in family households is associated with lower after-housing poverty levels. For families renting government housing, 42 per cent of one family households suffer after-housing poverty, compared with 28 per cent of households with additional families or non-family members. The corresponding proportions among those in non-government rented housing are 35 and 27 per cent respectively. A similar trend, although with a lower level of after-housing poverty, is evident among home buyers, where the proportion of households in poverty falls from 15 to 10 per cent when additional adults or families are present in the household.

Table 3.7. Households in after-housing poverty by tenure and household type.

Tenure and poverty	Household type[a] One family	Family plus adults	Two or more families	Group	Lone adult
Owned					
After-housing poverty-Number	444	98	34	15	59
Per cent	8.4	8.1	11.8	4.5	6.0
Total	5,270	1,206	291	332	974
Buying					
After-housing poverty-Number	1,291	125	15	24	103
Per cent	14.8	10.2	8.5	7.0	21.5
Total	8,725	1,226	176	345	478
Rented: government					
After-housing poverty-Number	5,745	1,161	187	80	643
Per cent	41.8	28.6	27.5	16.4	40.6
Total	13,749	4,055	681	489	1,582
Rented: other					
After-housing poverty-Number	4,490	1,326	538	453	938
Per cent	35.1	24.9	32.1	16.9	36.3
Total	12,801	5,325	1,677	2,676	2,585
Other					
After-housing poverty-Number	628	206	81	59	200
Per cent	28.7	21.8	16.9	16.5	33.4
Total	2,188	946	478	358	598
Total					
After-housing poverty-Number	12,598	2,916	855	631	1,943
Per cent	29.5	22.9	25.9	15.0	31.3
Total	42,733	12,758	3,303	4,200	6,217

a. See note a., Table 3.6.

Source: 1991 Census of Population and Housing.

A similar pattern is evident comparing lone adult and group households. Many of the adults living alone in rental housing have insufficient income to meet their housing costs, either in government or other rented dwellings. Two-fifths of lone person households in government housing and more than one-third of those in other rented accommodation suffer after-housing poverty. Among those buying their own home, one in five appear unable to meet their mortgage repayments without cutting back on other necessities. Sharing accommodation in a group household reduces the chances of poverty substantially, one-sixth of group households in rented accommodation being in this category. On this basis, group housing would seem to be an attractive alternative to lone person housing, both for landlords and for tenants. The number of groups renting government housing is, however, relatively low compared to other tenure categories, suggesting that there may be some restrictions on group households in that sector.

After-housing poverty and overcrowding

Faced with the problems of low income and unaffordable housing, some families may choose to share their housing and other costs, with the possible result that their dwelling is overcrowded. As shown in the previous chapter, the great majority (84 per cent) of multi-family households and more than half (54 per cent) of the family households with boarders or related adults present are overcrowded. If this overcrowding is strongly associated with families' attempts to relieve poverty, rehousing secondary families and other adults who share family dwellings may result in a substantial increase in the number of families in after-housing poverty.

Table 3.8 examines the effect that rehousing boarders and family related adults from overcrowded households would have on the after-housing poverty of families remaining in the dwellings. The figures in the first column show the current status of the household, categorised according to whether or not the household is in after-housing poverty and whether or not it is overcrowded. For households that are overcrowded, the figures in the second column indicate the status of the primary family if, theoretically, all boarders and related adults living in the household were rehoused. The results are thus calculated on the basis of the family income and bedroom requirements of the primary family alone, assuming they remain in the current dwelling. The third column combines these figures giving a theoretical distribution of after-housing poverty and overcrowding after rehousing boarders and related adults contributing to overcrowding.

Among the 1,184 home-owners in this analysis, 461 are currently overcrowded and 96 have incomes below their AHPL. Rehousing all non-family adults in overcrowded dwellings would relieve overcrowding for the primary family in 327 households while increasing the level of after-housing poverty by just 47 families. The number of households in after-housing poverty would therefore increase from 96 (8 per cent) to 143 (12

per cent), while the number of overcrowded dwellings would be reduced from 461 (39 per cent) to just 134 (11 per cent). A similar pattern is evident among home buyers, where rehousing boarders and related adults in overcrowded dwellings increases the number of households in after-housing poverty by 55, from 10 to 14 per cent, but alleviates overcrowding in 364 dwellings, a reduction from 38 per cent to just 8 per cent.

Table 3.8. Effect on after-housing poverty of rehousing boarders and related adults in overcrowded family households by tenure.[a]

Family/household after-housing poverty and overcrowding by tenure	One family plus adults households		Effect on over-crowded households of rehousing boarders and related adults		All households after rehousing adults when overcrowded	
	Number	Per cent	Number	Per cent	Number	Per cent
Owned						
In after-housing poverty						
and not overcrowded	48	4	55	5	103	9
and overcrowded	48	4	40	3	40	3
Not in after-housing poverty						
and overcrowded	413	35	94	8	94	8
and not overcrowded	675	57	272	23	947	80
Total	1,184	100	461	39	1,184	100
Buying						
In after-housing poverty						
and not overcrowded	70	6	81	7	151	12
and overcrowded	53	4	27	2	27	2
Not in after-housing poverty						
and overcrowded	411	34	73	6	73	6
and not overcrowded	678	56	283	23	961	79
Total	1,212	100	464	38	1,212	100
Rented: government						
In after-housing poverty						
and not overcrowded	451	11	949	24	1,400	35
and overcrowded	689	17	295	7	295	7
Not in after-housing poverty						
and overcrowded	1,610	40	287	7	287	7
and not overcrowded	1,242	31	768	19	2,010	50
Total	3,992	100	2,299	58	3,992	100
Rented: other						
In after-housing poverty						
and not overcrowded	454	9	962	18	1,416	27
and overcrowded	863	16	567	11	567	11
Not in after-housing poverty						
and overcrowded	2,235	42	595	11	595	11
and not overcrowded	1,722	33	974	18	2,696	51
Total	5,274	100	3,098	59	5,274	100

a. Numbers exclude those dwellings where the number of bedrooms are not stated and so differ slightly from those in Table 3.7. Families of related adults only are included. The 946 households in the other tenure category (see Table 3.7) include 345 which are overcrowded, 84 of which are estimated to be in after-housing poverty.

Source: 1991 Census of Population and Housing.

In rented housing, families who accommodate other adults in their household and are overcrowded are more evenly divided between those in poverty and those who are not, suggesting that relief from poverty is a more important factor in the decision to share. In public rented housing, more than half of families in overcrowded dwellings would be in poverty if living alone, and almost half this number obtain relief from after-housing poverty at the expense of being overcrowded. Specifically, 1,244 of 2,299 overcrowded dwellings are associated with families who would be in after-housing poverty if living alone in their current dwelling. Relieving overcrowding in these dwellings by rehousing boarders and related adults would increase the number of households in after-housing poverty by 555, from 28 to 42 per cent, while reducing the number of overcrowded dwellings from 2,299 to 582, from 57 to 14 per cent.

The effect in other rented housing is similar, although a higher proportion of families (22 per cent) are living in overcrowded conditions before taking other adult residents into account. Rehousing boarders and related adults in overcrowded dwellings would result in a net increase of 666 households in after-household poverty, from 25 to 38 per cent, and a reduction of 1,936 in the number of overcrowded dwellings, from 58 to 22 per cent.

Corresponding results for households of two or more families are shown in Table 3.9. For home owners, rehousing additional families (and other adults if present) would increase the number in poverty slightly from 34 to 53 households while reducing overcrowded dwellings from 175 to 54. For home buyers, the figures show an increase from 14 to 30 households in after-housing poverty and a reduction from 93 to 7 in overcrowded dwellings.

Overcrowding in rented dwellings is more common than among home owners and buyers, reflecting the higher proportion of multi-family households which are both in poverty and overcrowded and a correspondingly lower proportion of households which suffer neither form of housing stress. In public housing, 558 (83 per cent) of these multi-family households are overcrowded, but this would be reduced to 104 (16 per cent) if additional housing were found for the homeless families contributing to overcrowding. This would however have the effect of increasing the number of households in after-housing poverty by 117, from 28 to 45 per cent. In other rented housing, 1,540 of 1,665 multi-family households (92 per cent) are overcrowded, a figure which reflects in part the higher number of primary families inadequately housed. Rehousing additional families contributing to overcrowding would still leave 616 primary families (37 per cent) in housing stress while adding 192 households to the number currently in after-housing poverty, an increase from 32 to 44 per cent.

In summary, the results in Tables 3.8 and 3.9 show that the after-housing poverty rate of family households currently shared with boarders, related adults and secondary families would increase, by half in each

tenure, if those contributing to overcrowding and in housing need were rehoused. Rehousing boarders and related adults in housing need would reduce an estimated 1,427 additional households to after-housing poverty, while rehousing homeless secondary families would add a further 433 households. Overall, the number of current family households in after housing poverty would increase from 16,369 to 18,229 or from 28 to 31 per cent (Table 3.7). However, the housing need of these boarders, related adults and homeless families accounts for 2,509, 7,675 and 6,409 bedrooms respectively (Tables 2.4 and 2.5), together almost half (47 per cent) of the total housing need assessment. The provision of additional housing should then result in very substantial reductions in the extent of overcrowding in indigenous dwellings with relatively little effect on after-housing poverty levels.

Nevertheless, the departure of others from the household could result in a reduction of the income available for non-housing expenditure. To the extent that preferences for additional income outweigh concerns about overcrowding, the non-housing preferences of these families also needs consideration. Without assistance to relieve their poverty, it is possible that families relieved of overcrowding will again take in others, perpetuating the overcrowding problem that additional housing was meant to relieve. On the other hand, if the reasons for sharing are principally associated with the fulfilment of family and friendship obligations to provide shelter to others in need, rehousing homeless families and other adults in housing need will provide welcome relief from overcrowding for many indigenous families.

Another aspect of this relationship between after-housing poverty and overcrowding is the question of whether families and other adults in housing need have sufficient income to pay for their own housing. To examine this issue, Table 3.10 compares the after-tax incomes and AHPL of homeless families sharing overcrowded multi-family dwellings. The difference between their after-tax income and AHPL provides an estimate of the residual income available to a family for expenditure on housing. Because family income and AHPL estimates are categorised, only differences between category mid-point values can be identified, each category range being roughly $3,080 annually after tax.

Most of these families clearly have limited income available to spend on housing, and a very substantial proportion have insufficient income to meet other essential needs even before housing costs are taken into account. Two-fifths (41 per cent) have after-tax incomes below or about equal to their AHPL and a further 30 per cent have incomes, on average, around $3,080 per annum above their AHPL. For this latter group, applying all of this income to housing costs would allow them to pay, on average, about $60 a week without being reduced to poverty. The remaining 29 per cent of these families have somewhat higher incomes and could afford to pay at least this amount without falling below after-housing poverty levels.

Table 3.9. Effect of rehousing second and third families (and adults) in overcrowded multi-family households by tenure.[a]

Family/household after-housing poverty and overcrowding by tenure	Multi-family households		Effect on over-crowded households of rehousing additional families		All households after rehousing additional families	
	Number	Per cent	Number	Per cent	Number	Per cent
Owned						
In after-housing poverty						
and not overcrowded	6	2	24	8	30	10
and overcrowded	28	10	23	8	23	8
Not in after-housing poverty						
and overcrowded	147	51	31	11	31	11
and not overcrowded	109	38	97	33	206	71
Total	290	100	175	60	290	100
Buying						
In after-housing poverty						
and not overcrowded	5	3	25	15	30	18
and overcrowded	9	5	0	0	0	0
Not in after-housing poverty						
and overcrowded	84	49	7	4	7	4
and not overcrowded	72	42	62	36	133	78
Total	170	100	94	55	170	100
Rented: government						
In after-housing poverty						
and not overcrowded	26	4	218	33	244	36
and overcrowded	158	24	57	9	57	9
Not in after-housing poverty						
and overcrowded	400	60	47	7	47	7
and not overcrowded	86	13	236	35	322	48
Total	670	100	558	83	670	100
Rented: other						
In after-housing poverty						
and not overcrowded	16	1	381	23	396	24
and overcrowded	517	31	329	20	329	20
Not in after-housing poverty						
and overcrowded	1,013	61	287	17	287	17
and not overcrowded	119	7	533	32	652	39
Total	1,665	100	1,530	92	1,665	100

a. Numbers exclude those dwellings where the number of bedrooms are not stated and so differ slightly from those in Table 3.7. The 478 households in the other tenure category (see Table 3.7) include 239 which are overcrowded, 27 of which are estimated to be in after-housing poverty.

Source: 1991 Census of Population and Housing.

The majority of households which currently house these families are, as shown in Table 3.9, not in after-housing poverty, although this is less likely to be the case for those living in non-government rented housing. However, most of the secondary families have income below or marginally

above their AHPL and would have difficulty in housing themselves independently. Shared housing then provides an important avenue of relief from poverty for these indigenous families. They are reliant on these shared housing arrangements to avoid poverty, whereas the majority of primary families with whom they share are not.

Table 3.10. After-tax income available for housing expenditure: homeless families sharing overcrowded multi-family dwellings.[a]

After-tax income ($)	After-tax income in excess of AHPL Number of families: Income <= AHPL	$3,080	$6,160	$9,240	>=$12,320	Total families Number	Per cent
< 5,000	161					161	6
5,001-7,436	231					231	9
7,437-10,616	341	232				573	23
10,617-13,796	179	375	65			619	24
13,797-16,882	84	92	147	19		342	13
16,883-20,050	31	37	56	133	15	272	11
20,051-23,125	8	18	24	24	39	113	4
> 23,126		10	23	24	173	230	9
Total-Number	1,035	764	315	200	227	2,541	100
Per cent	41	30	12	8	9	100	

a. The overcrowding analysis in Chapter 2 identified 3,013 homeless indigenous families in overcrowded dwellings (see Table 2.4). This difference is due to families whose family income could not be assessed.

Source: 1991 Census of Population and Housing.

Table 3.11 presents corresponding results for other homeless families, those currently living in improvised dwellings. The similarity in income levels to those of secondary families sharing overcrowded family housing is apparent, supporting to the view that secondary families are as likely to be at risk of being homeless as families in improvised dwellings. The choice between these two forms of living arrangements may be determined more by locational and environmental conditions than by any differences in financial circumstances. While both are most strongly associated with living in rural areas (see Table 2.10), shared housing is much more common than improvised dwellings in urban centres, and improvised housing is heavily concentrated in the northern parts of Australia, in the north of Western Australia and Queensland and in the Northern Territory.

Table 3.12 examines the financial circumstances of single adults in housing need, including those identified on census night in hostels for the homeless, night shelters or refuges, those living in improvised dwellings and those contributing to overcrowding in family or group households. In

this case, the AHPL for a single adult is $90 per week or $4,680 per annum, and anyone with an income of $5,000 or less is either in, or very close to being in poverty.

Table 3.11. After-tax income available for housing expenditure: families in improvised dwellings.[a]

After-tax income ($)	After-tax income in excess of AHPL Number of families: Income <= AHPL	$3,080	$6,160	$9,240	>=$12,320	Total families: Number	Per cent
< 5,000	52					52	3
5,001-7,436	141					91	6
7,437-10,616	213	33				246	16
10,617-13,796	140	226	15			381	25
13,797-16,882	80	36	82	3		201	13
16,883-20,050	50	42	28	73		193	13
20,051-23,125	22	28	11	7	23	91	6
> 23,126	18	24	41	37	127	247	16
Total-Number	666	389	177	120	150	1,502	100
Per cent	44	26	12	8	10	100	

a. The overcrowding analysis in Chapter 2 identified 1,687 indigenous families in improvised dwellings (see Table 2.8). This difference is due to families whose family income could not be assessed and the inclusion in this table of 73 families of related adults.

Source: 1991 Census of Population and Housing.

Table 3.12. After-tax income of single adults in housing need: per cent in each income category by dwelling and household type.[a]

After-tax personal income ($)	Non-private dwelling	Improvised dwellings: Boarders	Group	Lone	Non-improvised dwellings: Boarders	Group	Total persons: Number	Per cent
< 5,000	42	21	13	11	19	10	2,379	21
5,001-7,436	30	50	60	42	41	39	4,848	42
7,437-10,616	16	21	14	21	22	21	2,487	21
10,617-13,796	4	6	6	9	9	9	986	9
> 13,796	8	2	6	17	8	21	897	8
Total-Number	750	1,173	201	174	8,804	495	11,597	100
Per cent	6	10	2	2	76	4	100	

a. The category boarders includes boarders and related adults of the primary family. Differences between the numbers here and the overcrowding analysis in Chapter 2 are due to cases where income is unknown, and the treatment of persons in overcrowded families of related adults as individuals in Chapter 2 and as overcrowded families here. The effect of this latter difference is to reduce the number of boarders in improvised dwellings by 203, from 1,473 to 1,270, and by 303, from 10,184 to 9,881, in non-improvised dwellings.

Source: 1991 Census of Population and Housing.

As was the case for homeless families, it is evident that lack of income restricts the housing choice of most of these single adults. Overall, one in five have incomes at or below their AHPL, and another two in five have incomes just in excess of the poverty line. Staying in the family home, or relying on relatives or friends appear to be the only housing options for those with incomes at this level, with the consequent effect on overcrowding. There are, nevertheless, a minority of around 20-25 per cent who do appear to have sufficient income to meet reasonable housing costs. The presence of relatives or boarders with incomes at this level could explain the number of families in rented housing relieved from after-housing poverty by sharing with other adults (Table 3.8).

Table 3.13. After-housing poverty and family housing stress by tenure.[a]

	Overcrowding of primary family alone					
	Overcrowded		Not overcrowded		Total	
Tenure and poverty	Number	Per cent	Number	Per cent	Number	Per cent
Owned-total	633		5,631		6,264	
Income < AHPL	141	22	484	9	625	10
Buying-total	584		9,085		9,669	
Income < AHPL	57	10	244	3	301	3
After-housing poverty	145	25	1,355	15	1,500	16
Rented: government-total	2,140		15,614		17,754	
Income < AHPL	483	23	1,888	12	2,371	13
After-housing poverty	1,026	48	6,652	43	7,678	43
Rented: other-total	814		15,034		18,848	
Income < AHPL	955	25	1,229	8	2,184	12
After-housing poverty	1,915	50	5,277	35	7,192	38
Other-total	577		1,766		2,343	
Income < AHPL	202	35	193	11	395	17
After-housing poverty	258	45	546	31	804	3
Total	7,748		47,130		54,878	
Income < AHPL	1,838	24	4,038	9	5,876	11
After-housing poverty	3,485	45	14,314	30	17,799	32

a. All indigenous primary families including primary families of related adults and families who share with other adults and other families but excluding those with bedrooms unknown. As in previous tables, the estimates include families whose income or housing costs data are missing, distributed proportionately across appropriate income categories.

Source: 1991 Census of Population and Housing.

The results in Table 3.13 examine the association between overcrowding and poverty for primary families, comparing the poverty level of families in overcrowded dwellings with that of families whose dwellings have adequate bedroom provision. The figures show, for each tenure, the number of primary families with incomes below their AHPL,

before any housing costs, and the total in after-housing poverty. The difference between these numbers thus represents those whose housing costs reduce their residual income below the poverty line.

In owned dwellings, housing costs are zero and only families with net incomes below their AHPL are relevant. In overcrowded dwellings, 22 per cent of primary families have incomes below the poverty line, compared to 9 per cent of those who are not overcrowded. The appropriate response in this case to alleviate overcrowding would seem to be an extension to the dwelling, but these families clearly do not have the financial resources to meet the associated costs. Irrespective of whether families are overcrowded or not, one-tenth of primary families who own their dwelling need assistance to relieve their poverty.

A small proportion of families buying homes, 6 per cent or 584 families, appear to be buying dwellings which are inadequate for their needs, and these families are more likely to be in after-housing poverty. One-quarter of these families suffer after-housing poverty, 15 per cent because of mortgage repayments and 10 per cent because their incomes are below the poverty line. For the great majority buying adequate housing, 15 per cent suffer after-housing poverty and 3 per cent have incomes below the poverty line.

Public housing might be expected to provide relief from poverty and provide adequate accommodation, but the figures give rise to some concern on both counts. Twelve per cent of primary families are overcrowded in their current dwelling, and 43 per cent are in after-housing poverty, 30 per cent because of housing costs. Whatever approach authorities use to assess affordable rents, family requirements for other non-housing income should, surely, also be taken into account.

Families in poverty are overrepresented among those with inadequate government housing, particularly the poorest families with incomes below the poverty line. In part, it may be that families in poverty before housing costs are more likely to have older children, increasing both their AHPL and bedroom requirements and hence the association between families in poverty before housing costs and overcrowding. If these children leave home, the remainder of the family may be neither overcrowded nor in poverty, but adult childrens' lack of income may give them little choice but to remain at home. Families may not want to leave their homes even though they are overcrowded, and housing authorities may also not see them as having a pressing need. On the other hand, given the relatively small number involved, this may simply reflect housing authorities' efforts to provide some form of shelter to families in poverty, with adequate housing being provided as and when it becomes available.

The alternative to public housing for most indigenous families is the private rental market or Aboriginal community-based housing association stock. The fact that these two types of housing cannot be separated in the census makes any analysis of their respective impact impossible. Nevertheless, it is evident that overcrowding is more likely in this sector

than in public housing, and that inadequate housing is associated with family poverty. Half of families in overcrowded dwellings are in after housing poverty, compared to just over one-third (35 per cent) of those with adequate housing. This difference reflects the overrepresentation of families with income below the poverty line in overcrowded dwellings: one-quarter of overcrowded families have incomes below the poverty line, compared to 8 per cent of those in adequate housing.

Table 3.14. After-tax income available for additional housing expenditure: primary families in housing stress.

After-tax income category and residual income above AHPL plus housing costs	Primary family additional bedroom need					
	One bedroom		Two bedrooms		Three or more bedrooms	
	Number	Per cent	Number	Per cent	Number	Per cent
After-tax income < $23,125						
Residual income						
$3,080	284	15	23	5		
$6,160	84	5	6	1		
>$9,240	38	2				
$23,125 < After-tax income <$28,915						
Residual income						
$3,080	155	9	45	10	8	3
$6,160	141	8	24	5	3	1
>$9,240	136	7	3	1		
$28,915 < After-tax income						
Residual income						
$3,080	47	3	38	8	33	16
$6,160	85	5	59	13	36	16
>$9,240	862	47	255	56	145	64
Total with residual income						
Residual income						
$3,080	486	26	106	23	41	18
$6,160	310	17	89	20	39	17
>$9,240	1,036	57	258	57	145	64
Total	1,832	100	453	100	225	100

a. The estimates in Table 3.13 indicate that 4,263 of 7,748 overcrowded primary families (55 per cent) are not in after-housing poverty. This number includes 984 families with missing incomes which were allocated proportionately to this category. Further, half of the families whose income after housing costs and AHPL categories are equal are included in this group, a total of 488 families, 15 per cent of those with assessable income. These families clearly cannot afford increased housing costs. A further 281 families have missing housing costs but are assumed not to be in after-housing poverty because their income before tax exceeds $20,000 per year. Exclusion of these cases reduces the number of families examined to 2,510.

Source: 1991 Census of Population and Housing.

While 45 per cent of all primary families in housing stress are estimated to be in after-housing poverty, a slight majority are not. For these

families, the analysis in Chapter 2 identifies additional bedrooms required to relieve overcrowding, relief which could perhaps be obtained by families paying more in housing costs for larger dwellings, assuming such a choice was available. To investigate this option, the residual incomes and bedroom need of overcrowded families which are not in after-housing poverty are examined in Table 3.14.

The results in Table 2.9 show 70 per cent of overcrowded primary families require just one additional bedroom to relieve their overcrowding, 30 per cent need two bedrooms and 10 per cent need three or more bedrooms. This distribution is reflected here among families with residual income after housing costs greater than their AHPL, where 73 per cent need one additional bedroom, 18 per cent need two additional bedrooms, and the remaining 9 per cent need three or more bedrooms. In each of these categories, roughly 60 per cent of families have a residual income after housing costs of some $9,000 per year or more above their AHPL, suggesting that a larger, higher cost, dwelling would be within the financial reach of most families without increasing poverty levels.

It is also evident that the incomes of these families increase with additional bedroom need, the proportion with annual after-tax income greater than $28,915 increasing (from 55 to 78 to 95 per cent) as bedroom need increases. In this case, older children may be making a positive contribution to family incomes by remaining at home but again at the cost of increased overcrowding. Given access to appropriate housing, the majority of these overcrowded primary families appear to have sufficient income to rent a larger dwelling, or older children could perhaps afford to live separately. Nevertheless, a substantial minority have little residual income in excess of the poverty line and could not be expected to increase their housing costs in order to relieve overcrowding.

To summarise the results dealing with family overcrowding and after-housing poverty, Table 3.15 shows the percentage distribution of families in housing stress from overcrowding and poverty, before and after housing costs. For families with housing, the adequacy of their current dwelling for their own bedroom need and of their incomes to meet housing and other essential costs are assessed. For second and third families who currently share a family dwelling, overcrowding and income relative to their poverty line are assessed, while families in improvised dwellings are assumed to be in housing need and only income level is considered.

The results for primary families repeat those given in Table 3.13, presenting them as percentages. The total number of 56,687 families includes families of related adults and those whose bedroom need could not be assessed because of missing information. The estimated number of families in housing stress from overcrowding is therefore higher than that given in Table 2.9 which excluded these families, although the percentage distribution across categories is unlikely to be affected.

Overall, one in sixteen primary families (6.3 per cent) are assessed as being overcrowded and in after-housing poverty. Just over half of these

families, 3.3 per cent, have incomes below the poverty level, and a slightly lower number, 3.0 per cent, are in poverty after paying housing costs, assuming they pay the full amount. Most of these families are tenants, 30 per cent renting government housing and 55 per cent in other types of rental (Table 3.13). More than two-fifths share with other adults (29 per cent) or other families (13 per cent), perhaps obtaining some relief from poverty by sharing costs (Tables 3.8 and 3.9). For these families, and those who live with them, relief from overcrowding is perhaps less of a concern than relief from poverty.

Table 3.15. National estimates of family housing stress from overcrowding and poverty.

Housing need and income level	Per cent
Primary families in non-improvised dwellings (number = 56,687)	
Family overcrowded if living alone in current dwelling and	
Income < AHPL	3.3
AHPL < Income < AHPL plus housing costs	3.0
Not in after-housing poverty	7.8
Not overcrowded if living alone in current dwelling and	
Income < AHPL	7.4
AHPL < Income < AHPL plus housing costs	18.7
Not in after-housing poverty	59.8
Total	100.0
Second and third families in non-improvised dwellings (number = 3,740)	
Overcrowded in current dwelling and	
Income <= AHPL	35.7
Income > AHPL	52.0
Not overcrowded in current dwelling and	
Income <= AHPL	2.3
Income > AHPL	10.0
Total	100.0
Families in improvised dwellings (number = 1,687)	
Income <= AHPL	44.3
Income > AHPL	55.7
Total	100.0

Source: 1991 Census of Population and Housing and previous tables.

A further 7.8 per cent of indigenous primary families are inadequately housed but not in after-housing poverty, although relief from overcrowding would, in most cases, require only one additional bedroom (Table 3.14). Just over one-fifth of these families own (12 per cent) or are buying (10 per cent) their home and three-fifths are tenants, one-quarter (26 per cent) in public housing (Table 3.13). Despite being overcrowded if living alone, one-quarter of these families share with other adults and one-tenth with another family (Tables 3.8 and 3.9). In this case however, about half of these families have residual income after housing costs well in

excess of after-housing poverty levels (Table 3.14), while the majority of the adults and families they share housing with are either in poverty or close to it (Tables 3.10 and 3.12). If these families could be relieved of their responsibilities to others, it is at least feasible that a significant proportion would solve their own overcrowding problem, given that adequate housing were available to them.

Just over one quarter (27 per cent) of indigenous primary families are adequately housed but in after-housing poverty, 7.4 per cent having incomes below their AHPL (Table 3.13). Almost half (46 per cent) of these families are in public housing, a small number (3 per cent) are home owners and 9 per cent are home buyers (Table 3.13). Almost one-third (29 per cent) of these families take in other adults or families, giving some relief from poverty but causing overcrowding in a majority of households. The primary need of these families is not for housing, but for adequate income or, in most cases, more affordable rents which would allow adequate after-housing living expenses.

The majority of primary families, 60 per cent, are neither in after-housing poverty nor are they overcrowded in their dwellings. Most of the home owners (82 per cent) and home buyers (80 per cent) are in this category, but only half of the renters, whether in public housing or another type of tenancy (Table 3.13). Fewer of these families, 22 per cent, share with other adults or other families, although almost half (45 per cent) of all the indigenous primary families who share their dwellings are in this category. These families provide housing support, and perhaps also income support, to many families and other adults who would otherwise be homeless and in poverty.

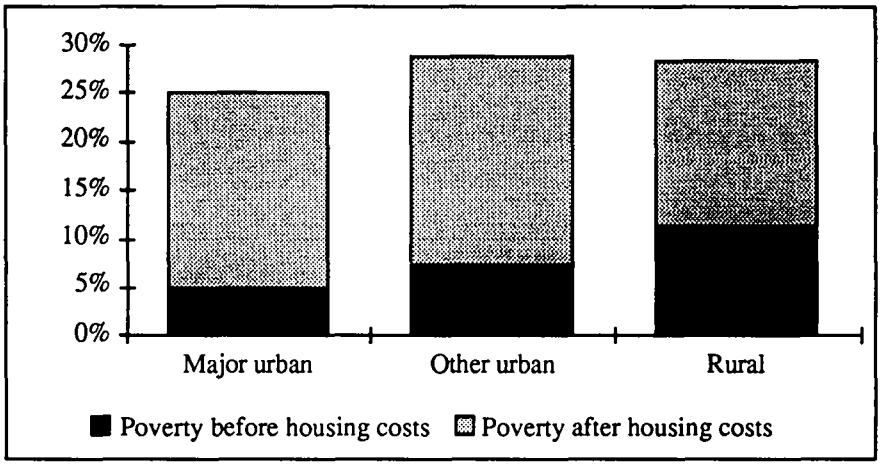
The second panel of Table 3.15 is based on the results in Table 3.10 and additional data on the 'other' families who share dwellings without overcrowding. These families are clearly a small minority, with only 12 per cent avoiding overcrowding in the dwelling. Among the remaining 88 per cent, two-fifths have incomes below the poverty line, and half of the remainder have only slightly higher incomes (Table 3.10). Families living in improvised dwellings face a similar situation of low income levels (Table 3.11). If these families are to obtain their own homes, it will need to be at a very low cost in most cases.

Regional variation in after-housing poverty

The results in this section examine the variation in after-housing poverty by section-of-State, between States and Territories and between the 36 ATSIC regional council areas. Estimates of the percentage of indigenous households in poverty before housing costs and those in poverty after housing costs are presented in the form of bar charts, with the numbers given in tables at the end of the section. Improvised dwellings (1,712 households) are excluded from the estimates, the income levels of these families and adults relative to their poverty line having been discussed

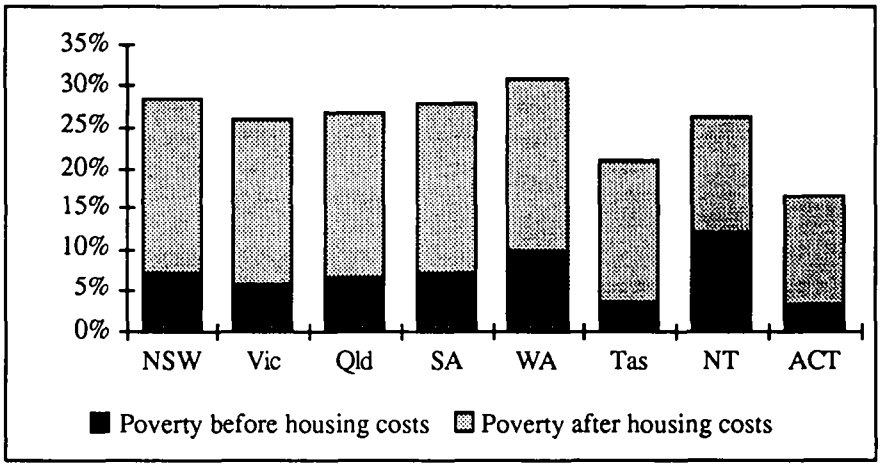
above (Tables 3.11 and 3.12). The number of households included in the analyses is therefore 69,211, as in Table 3.3.

Figure 3.1. Per cent of households in poverty before and after housing costs by section-of-State.



Source: Table 3.16.

Figure 3.2. Per cent of households in poverty before and after housing costs by State/Territory.



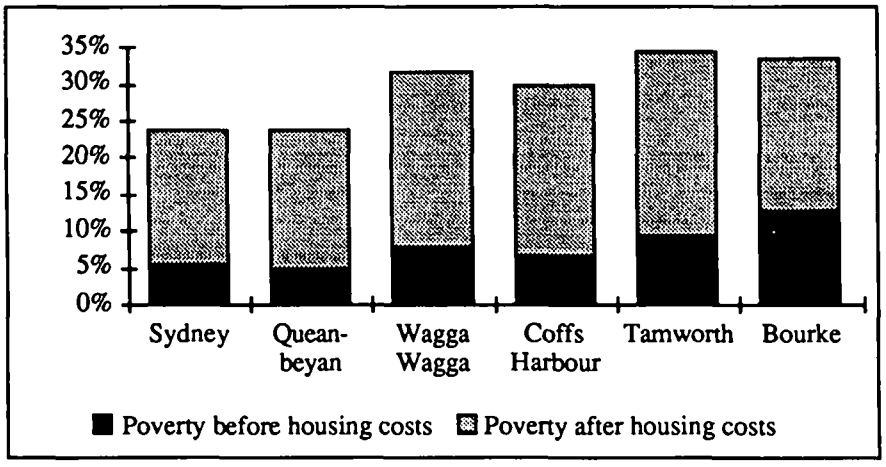
Source: Table 3.17.

Figure 3.1 shows the proportion of households in poverty by section-of-State. In major urban centres, 5 per cent of households have incomes below the poverty line, increasing to 7 per cent in other urban centres and 11 per cent in rural areas. The proportion of households in poverty after housing costs is similar in major urban and other urban centres, 20 and 22

per cent respectively, but lower, at 17 per cent of households, in rural areas. The total in after-housing poverty is then 25 per cent of the indigenous households in major urban centres, and 28-29 per cent in both other urban and rural areas.

The corresponding results by State and Territory are shown in Figure 3.2. In the four mainland eastern and southern states, poverty levels both before and after housing costs are very similar, with 6-7 per cent of indigenous households in each State having income below the poverty line and 20-22 per cent paying housing costs which take them below the poverty level. Western Australia has a higher proportion of households, 10 per cent, in poverty before housing costs but a similar proportion to the other states, 21 per cent, reduced to poverty by housing costs. The proportion of households with incomes below the poverty line is highest in the Northern Territory (12 per cent), but relatively fewer households (14 per cent) pay unaffordable housing costs. Tasmania and the Australian Capital Territory have only 3 per cent of households with income below the poverty line, as well as having relatively low proportions, 18 and 13 per cent respectively, in poverty after housing costs.

Figure 3.3. Per cent of households in poverty before and after housing costs by regional council, New South Wales.

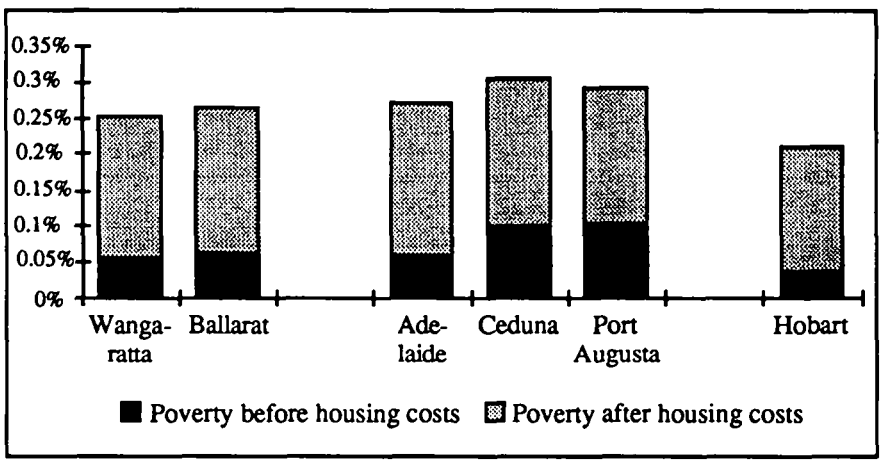


Source: Table 3.18.

Variations between New South Wales regional council areas reflect the patterns associated with section-of-State (Figure 3.3). Sydney and Queanbeyan, which includes the Australian Capital Territory, have poverty levels corresponding to those of major urban centres, Wagga Wagga and Coffs Harbour appear typical of other urban centres, and Tamworth and Bourke reflect the poverty distribution of rural areas. Indeed, this pattern recurs with surprising regularity across many regions in all States, although there are some notable exceptions.

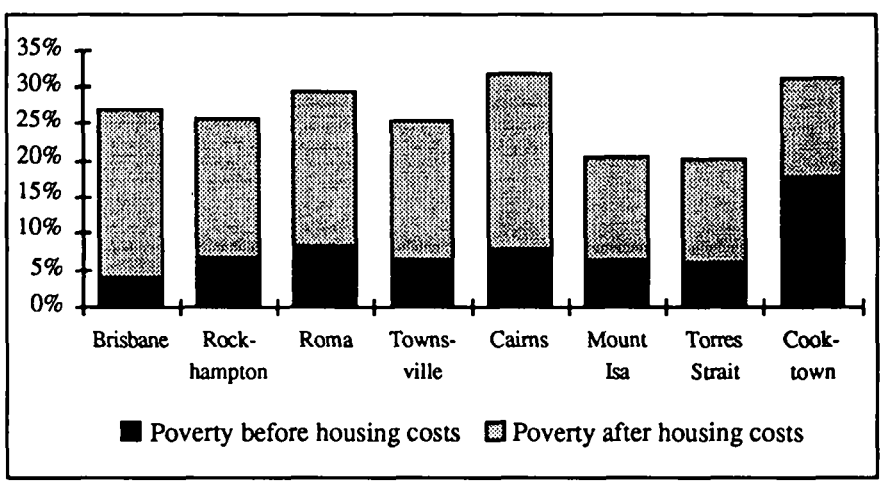
Figures for the two regional councils in Victoria (Figure 3.4) simply repeat the poverty level identified for the state as a whole, reflecting the similarities between the two regions in population size and distribution across major urban, other urban and rural areas. In South Australia, the Adelaide Regional Council has a level of poverty typical of a major urban centre, while Ceduna and Port Augusta reflect the higher poverty level associated with rural areas.

Figure 3.4. Per cent of households in poverty before and after housing costs by regional council, Victoria, South Australia and Tasmania.



Source: Table 3.18.

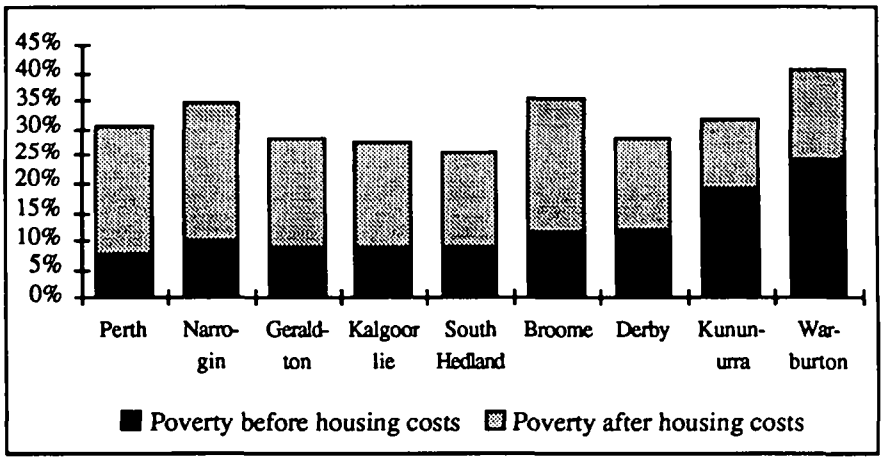
Figure 3.5. Per cent of households in poverty before and after housing costs by regional council, Queensland.



Source: Table 3.18.

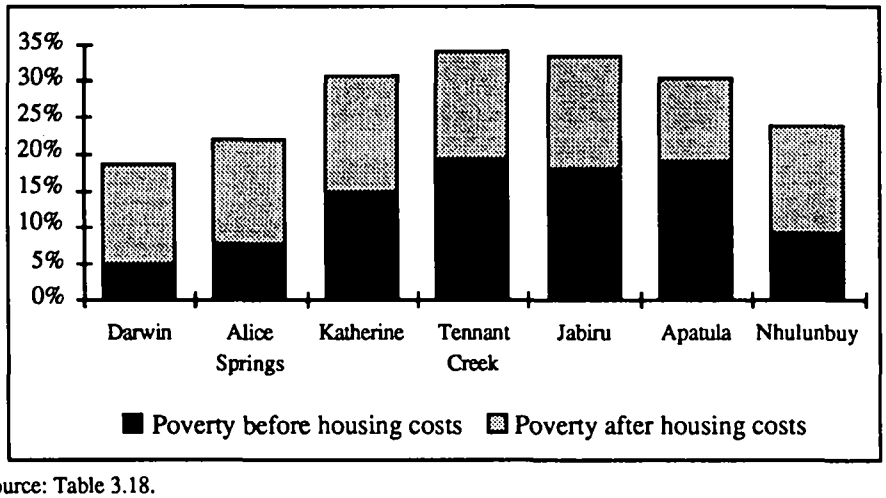
In Queensland, Brisbane has a lower proportion of families in poverty before housing costs than other regional councils, just 4 per cent, compared to 6-8 per cent in all other regions except Cooktown, where the number of households with income below the poverty line is very high at 17 per cent. Offsetting this to some extent is the lower than average proportion, 14 per cent, of households in that region, in poverty after housing costs. Torres Strait and Mount Isa regions also have low levels of poverty after housing costs, proportions in other regions being around 20 per cent, rising to 23-24 per cent in Brisbane and Cairns.

Figure 3.6. Per cent of households in poverty before and after housing costs by regional council, Western Australia.



Source: Table 3.18.

Figure 3.7. Per cent of households in poverty before and after housing costs by regional council, Northern Territory.



Source: Table 3.18.

Higher poverty levels in Western Australia appear to reflect the greater concentration of the Aboriginal population in rural and more remote areas and lower incomes associated with living in those areas. Perth has the lowest proportion of households in poverty before housing costs, 7 per cent, although this is the highest level of all the State capital city regions. The two most remote regions, Kununurra and Warburton, have the highest proportions of families with income below the poverty line, 19 and 24 per cent respectively, with levels in the remaining regions being close to the State average of 10 per cent. The indigenous populations of Broome and Narrogin appear to be disproportionately disadvantaged by housing costs, with one-quarter of households in these regions being reduced to after-housing poverty, a level comparable to that of Perth (23 per cent).

Darwin has the lowest level of after-housing poverty of all regional councils throughout Australia, with 5 per cent of indigenous households in poverty before housing costs and 14 per cent after housing costs. In four regions in the Territory however, the proportion of households with incomes below the poverty line is significantly higher than the rural average of 10 per cent, reflecting the lack of income in remote communities. In Katherine, 15 per cent of households have incomes below the poverty line, while the comparable proportions in Tennant Creek, Jabiru and Apatula are 18-19 per cent. Throughout the Territory, poverty after housing costs is relatively low, reflecting the Territory average of 15 per cent of households in this category.

A national comparison of these proportions is shown in Figure 3.8, with regions ranked according to their overall level of after-housing poverty. Warburton clearly stands out on this measure as having the highest proportion of households with incomes below the poverty line and also a relatively high proportion, for a remote area, of households with unaffordable housing costs. Six other remote regions, four in the Northern Territory, Cooktown and Kununurra, have relatively large numbers of households in poverty before housing costs, but fewer households suffer poverty after housing costs. With these exceptions, and the low rates obtained for Darwin and Torres Strait, the broad pattern of after-housing poverty appears to reflect the section-of-State characteristics of regions, with increasing poverty levels from more urban to more rural populations.

Figure 3.9, shows the distribution of the number of households in after-housing poverty between regional councils. The distribution broadly reflects the large variation in population sizes which vary from 8,215 households in Sydney, 5,455 in Brisbane and 4,927 in Coffs Harbour to just 240 households in Warburton and 305 in Ceduna. Thus, while a region such as Warburton is very severely disadvantaged, the number of households in poverty is only 98, 0.5 per cent of all indigenous households in financial housing stress. While these small communities appear almost insignificant in the total picture of Aboriginal and Torres Strait Islander poverty, the results of these analyses show them to be the most severely disadvantaged, both by poverty and by the lack of adequate housing.

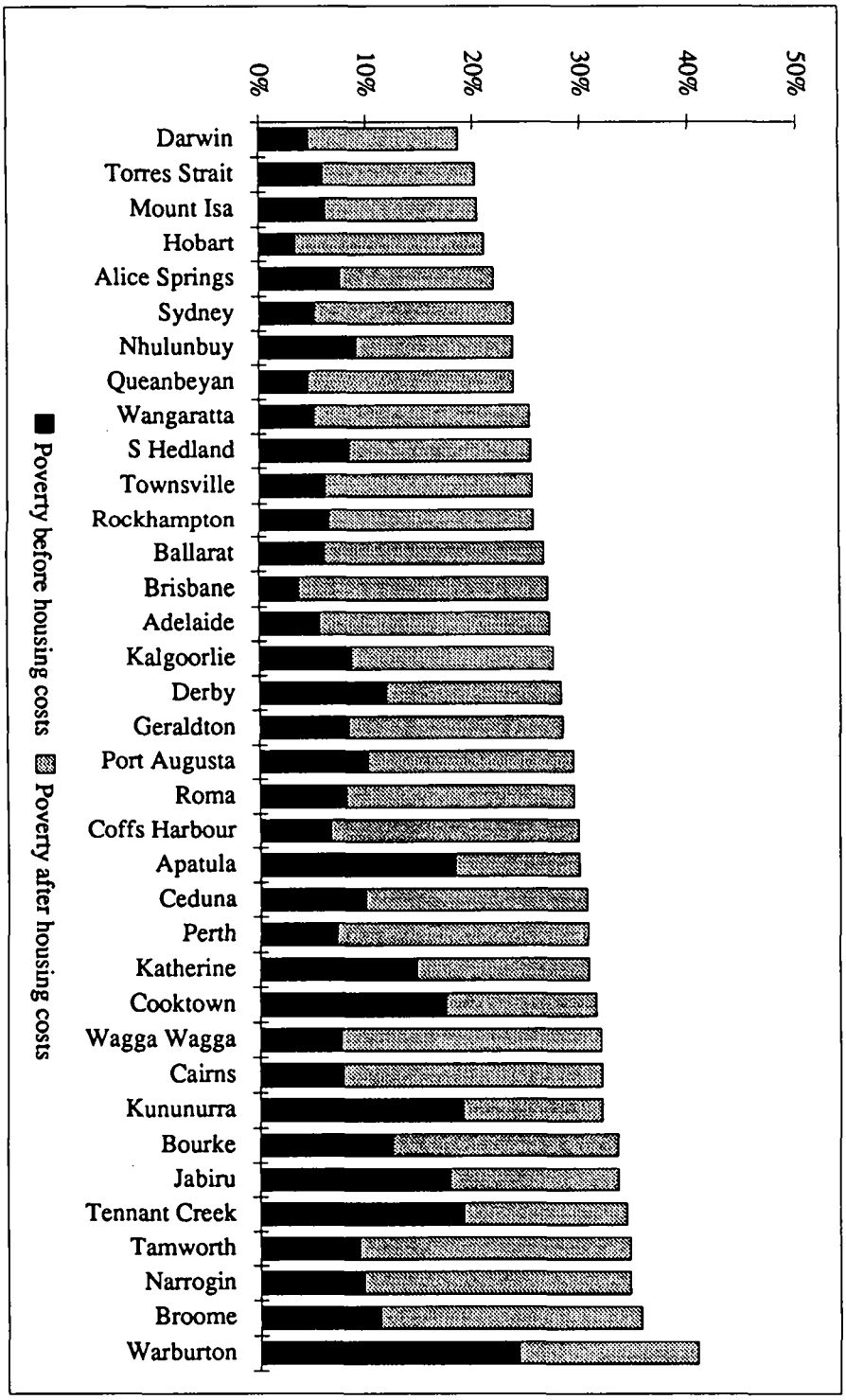


Figure 3.8. Per cent of households in poverty before and after housing costs by regional council, Australia.

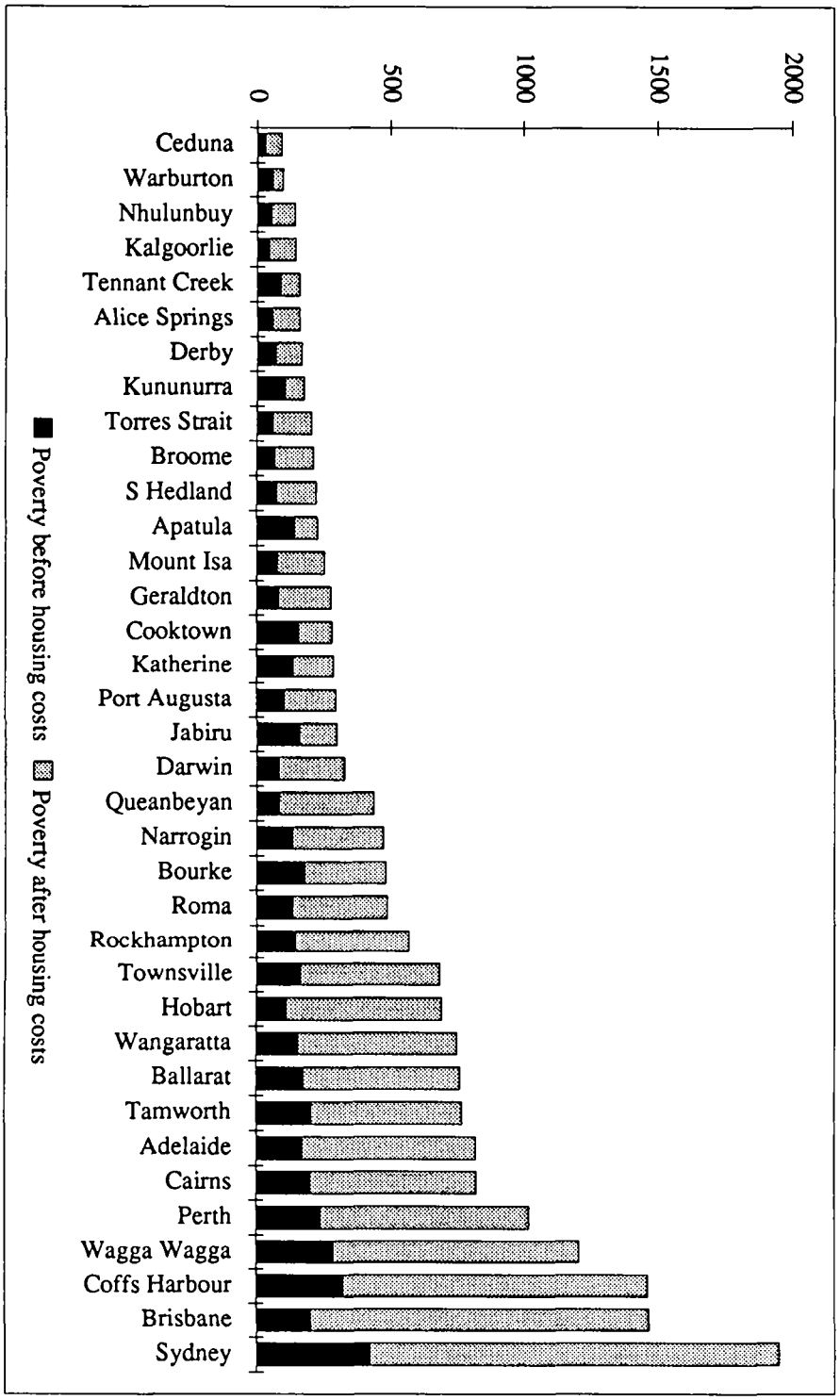


Figure 3.9. Number of households in poverty before and after housing costs by regional council, Australia.

Table 3.16. Households in after-housing poverty by section-of-State.[a]

Section-of-State	Total dwellings Number	Income < AHPL Number	Per cent	Income < AHPL plus housing costs Number	Per cent	Total in after-housing poverty Number	Per cent
Major urban	23,943	1,163	5	4,847	20	6,010	25
Other urban	28,732	2,008	7	6,274	22	8,282	29
Rural	16,536	1,826	11	2,872	17	4,698	28
Total	69,211	4,997	7	13,993	20	18,990	27

a. The estimates include households with missing income or housing costs data, which are distributed proportionately across the appropriate income categories. Minor variations between tables result from estimation and rounding procedures.

Source: 1991 Census of Population and Housing.

Table 3.17. Households in after-housing poverty by State/Territory.[a]

State/ Territory	Total dwellings Number	Income < AHPL Number	Per cent	Income < AHPL plus housing costs Number	Per cent	Total in after-housing poverty Number	Per cent
NSW	21,869	1,482	7	4,728	22	6,210	29
Victoria	5,850	330	6	1,189	20	1,519	26
Queensland	17,840	1,133	6	3,678	21	4,811	27
SA	4,374	301	7	916	21	1,217	28
WA	9,148	873	10	1,948	21	2,821	31
Tasmania	3,309	113	3	584	18	697	21
NT	6,200	729	12	897	14	1,626	26
ACT	621	20	3	82	13	102	16
Total	69,211	4,981	7	14,022	20	19,003	27

a. The estimates include households with missing income or housing costs data, which are distributed proportionately across the appropriate income categories. Minor variations between tables result from estimation and rounding procedures.

Source: 1991 Census of Population and Housing.

Table 3.18. Households in after-housing poverty by regional council.[a]

Regional Council	Total dwellings Number	Income < AHPL Number	Income < AHPL Per cent	Income < AHPL plus housing costs Number	Income < AHPL plus housing costs Per cent	Total in after-housing poverty Number	Total in after-housing poverty Per cent
Sydney	8,215	425	5	1,529	19	1,954	24
Queanbeyan	1,850	85	5	356	19	441	24
Wagga Wagga	3,804	289	8	922	24	1,211	32
Coffs Harbour	4,927	325	7	1,142	23	1,467	30
Tamworth	2,234	207	9	565	25	772	34
Bourke	1,460	181	12	307	21	488	33
Wangaratta	2,978	155	5	599	20	754	25
Ballarat	2,872	176	6	590	21	766	27
Adelaide	3,042	171	6	654	21	825	27
Ceduna	305	30	10	63	21	93	31
Port Augusta	1,027	104	10	197	19	301	29
Hobart	3,309	113	3	584	18	697	21
Brisbane	5,455	203	4	1,268	23	1,471	27
Rockhampton	2,234	146	7	427	19	573	26
Roma	1,682	136	8	358	21	494	29
Townsville	2,694	165	6	524	19	689	25
Cairns	2,591	202	8	625	24	827	32
Mount Isa	1,251	78	6	178	14	256	20
Torres Strait	1,023	61	6	147	14	208	20
Cooktown	910	158	17	128	14	286	31
Perth	3,340	240	7	784	23	1,024	30
Narrogin	1,380	134	10	343	25	477	35
Geraldton	996	83	8	199	20	282	28
Kalgoorlie	535	46	9	101	19	147	28
South Hedland	892	75	8	152	17	227	25
Broome	605	68	11	147	24	215	35
Derby	600	71	12	98	16	169	28
Kununurra	560	106	19	73	13	179	32
Warburton	240	58	24	40	17	98	41
Darwin	1,764	83	5	248	14	331	19
Alice Springs	738	56	8	106	14	162	22
Katherine	947	139	15	152	16	291	31
Tennant Creek	473	90	19	72	15	162	34
Jabiru	906	161	18	142	16	303	34
Apatula	757	140	18	89	12	229	30
Nhulunbuy	605	55	9	89	15	144	24

a. The estimates include households with missing income or housing costs data, which are distributed proportionately across the appropriate income categories. Minor variations between tables result from estimation and rounding procedures.

Source: 1991 Census of Population and Housing.

4. Comparisons of housing stress between indigenous and non-indigenous populations

The preceding chapters have examined the occurrence of homelessness, overcrowding and after-housing poverty in Aboriginal and Torres Strait Islander dwellings, and the relationship of these housing problems to other characteristics such as housing tenure and location of residence. In this chapter, these same measures are derived for the total population, allowing comparisons to be made between the results for indigenous and non-indigenous families and adults.

Overcrowding and housing need comparisons

National estimates of overcrowding and housing need, derived using the methodology discussed in Chapter 2, and comparisons between the indigenous and non-indigenous populations are given in Table 4.1. For indigenous families and adults, the results reported previously in Table 2.9 are repeated and represented as proportions of the total population and total housing need.

The overrepresentation of indigenous families and adults among the homeless and overcrowded is evident throughout, with their proportions in every category of housing need being significantly higher than their proportions in the population. Indigenous elementary families represent just 1.4 per cent of all elementary families in Australia, but account for 38.3 per cent of those living in improvised dwellings and 18.0 per cent of secondary families who share overcrowded housing. Combining these two categories, indigenous families represent 22.3 per cent of the 21,102 families assessed as being homeless in Australia. The higher proportion of indigenous families among homeless families requiring three or more bedrooms also indicates that homeless indigenous families tend to be larger, on average, than their non-indigenous counterparts.

Indigenous primary families are also overrepresented among primary families in housing stress from overcrowding, representing 5.4 per cent of all families in this category. Their housing stress is also more severe than that of their non-indigenous counterparts, the representation of indigenous families increasing as the number of additional bedrooms required to relieve overcrowding in their current dwelling increases.

Overall, 8 per cent of indigenous elementary families suffer homelessness, with a further 13 per cent in housing stress from overcrowding in their current dwelling, net of any other families or adult residents who share the dwelling. The corresponding proportions among non-indigenous families are 0.4 per cent suffering homelessness and 3.2 per cent in housing stress.

Table 4.1. Indigenous and non-indigenous populations and housing need.

Eligible population/ housing need	Family units/persons and per cent indigenous			
	Indigenous		Non-indigenous	Total
	Number	Per cent of total	Number	Number
Eligible population				
Elementary families	58,689	1.4	4,119,916	4,178,605
Boarders	4,264	3.6	113,836	118,100
Related adults	15,030	4.2	346,517	361,547
Group members	5,200	1.0	499,935	505,135
Other adults	971	11.2	7,736	8,707
Family homelessness and bedroom need				
Improvised dwelling	1,687	38.3	2,713	4,400
Second or third family	3,013	18.0	13,689	16,702
Total families	4,700	22.3	16,402	21,102
one bedroom household	925	17.1	4,494	5,419
two bedroom household	2,338	18.8	10,127	12,465
three bedroom household	923	37.2	1,560	2,483
four+ bedroom household	514	69.9	239	735
Total bedroom need	10,823	26.3	30,376	41,195
Family housing stress and bedroom need				
Total families	7,523	5.4	132,978	140,501
one additional bedroom	5,273	4.3	117,503	122,776
two additional bedrooms	1,483	9.9	13,444	14,927
three additional bedrooms	480	22.0	1,706	2,186
four+ additional bedrooms	287	46.9	325	612
Total bedroom need	10,995	6.8	150,879	161,874
Other adults housing need				
Improvised dwelling	1,892	42.4	2,573	4,465
Other dwelling	11,495	9.3	112,425	123,920
Total bedroom need	13,387	10.4	114,998	128,385
Boarders	2,735	7.4	34,213	36,948
Related adults	8,922	15.8	47,377	56,299
Group/other adults	1,730	4.9	33,408	35,138
Total bedroom need	35,205	10.6	296,241	331,446

Sources: 1991 Census of Population and Housing and results in Table 2.9.

Indigenous families are more likely than non-indigenous families to have boarders or relatives sharing their home. This is reflected in the higher proportions, relative to the indigenous proportion of families, of indigenous adult boarders (3.6 per cent) and relatives (4.2 per cent) sharing family dwellings. This, and the higher probability that indigenous families are already inadequately housed, provides some explanation for the overrepresentation of indigenous boarders (7.4 per cent) and related adults (15.8 per cent) among those in housing need. Put another way, about three-fifths of indigenous boarders (64 per cent) and related adults (59 per cent)

contribute to overcrowding and are in housing need, while the corresponding proportions for their non-indigenous counterparts are 30 and 14 per cent respectively.

In group households, indigenous adults represent just 1 per cent of all household members but 3 per cent of those in overcrowded dwellings (the numbers in housing need being obtained by subtracting other adults from group/other adults in housing need). Other adults in housing need include lone persons in improvised dwellings and persons in hostels for the homeless, night shelters and refuges. Indigenous adults represent one-ninth (11.2 per cent) of the population in this category, seven times the proportion of Aboriginal and Torres Strait Islander people in the population (1.6 per cent).

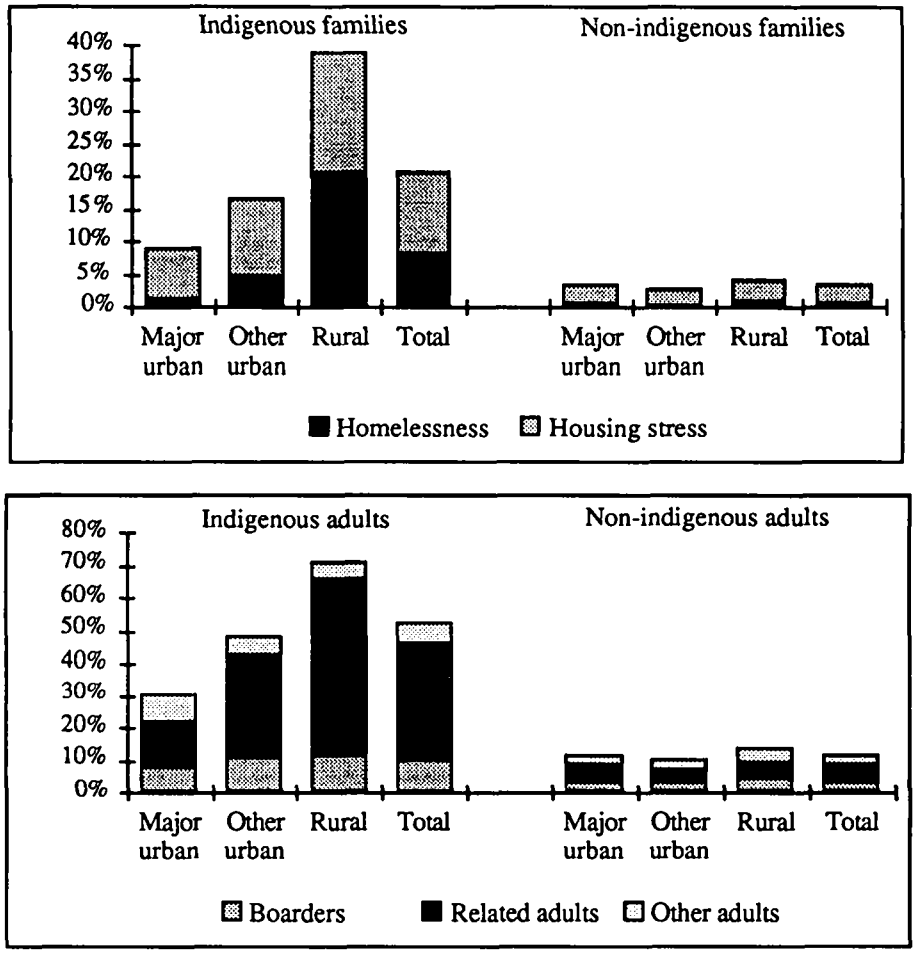
Comparisons of the proportions of indigenous and non-indigenous families and single adults in housing need are illustrated in Figures 4.1 to 4.3, showing variations by section-of-State, tenure, and between States and Territories. The figures are derived from results in Chapter 2 for the indigenous population and from estimates of housing need for the total population presented in Tables 4.2 to 4.4. The view provided in the figures is not specifically included in these tables but is derived separately.

The indigenous population is less likely than the non-indigenous population to live in major urban centres, comprising 0.7 per cent of families and 0.9 per cent of other adults, while their housing need represents about 2 per cent of total family homelessness, family housing stress and other adult housing need in these centres (Table 4.2). In other urban areas, the indigenous population, representing 2.6 per cent of families and 4.9 per cent of other adults, accounts for about one-third of the homeless families, one-tenth of family housing stress, and one-fifth of other adult housing need. In rural areas, poorer housing conditions and the greater tendency to share housing with other families and relatives results in almost half of total family homelessness, almost one-eighth of family housing stress and more than one-third of single adult housing need being associated with the indigenous population.

Both the level of Aboriginal and Torres Strait Islander housing need and the variation by section-of-State appear in stark contrast to the housing need of the non-indigenous population. Across the three section-of-State categories, family homelessness among the non-indigenous population varies little, from 0.2 per cent in other urban centres to 0.4 per cent in major urban areas and 0.6 per cent in rural areas. Relative to these figures, indigenous families are three times more likely than non-indigenous families to suffer homelessness in major urban areas (1.2 per cent), 20 times more likely in other urban areas (4.5 per cent), and 33 times more likely in rural areas (20.3 per cent). Similarly, non-indigenous family housing stress is about 3 per cent in urban areas and 4 per cent in rural areas, while the proportions of indigenous families in housing stress are 8, 12 and 19 per cent respectively in major urban, other urban and rural areas (Figure 4.1).

Similarly, the proportions of non-indigenous adults in housing need show little variation, ranging from 10 to 15 per cent across the three section-of-State categories. For indigenous adults, 30 per cent are in housing need in major urban areas, rising to 48 per cent in other urban centres and 72 per cent in rural areas, this variation being a reflection of the increasing contribution of adult family relatives to overcrowding.

Figure 4.1. Per cent of indigenous and non-indigenous families and other adults in housing need by section-of-State.[a]



a. The per cent of families in each section-of-State category in family homelessness and family housing stress. For boarders, related adults and group/other adults, the number in housing need expressed as a percentage of the combined total number of all these adults in each section-of-State category.

Sources: Table 2.10 and Table 4.2.

In relation to tenure categories, the indigenous population is underrepresented among home owners and home buyers and overrepresented in rental housing, particularly public housing, in

comparison to other Australians (Table 4.3). Indigenous families and other adults represent 6.5 and 10 per cent respectively of families and other adults living in rented government housing. They are however more likely to be overcrowded than their non-indigenous counterparts, contributing 30 per cent to family homelessness and accounting for about one-sixth of family housing stress and other adult housing need. In other rented housing, the indigenous population comprises about 3 per cent of tenants, and they are again heavily overrepresented among those in housing need, most particularly where secondary families or relatives share overcrowded family dwellings. The small proportion of indigenous home owners and home buyers is reflected in their small contribution to housing need in these tenures. Nevertheless, they are still overrepresented in all housing need categories relative to their proportion in the population.

Non-indigenous family housing need is twice as high in rented housing as among home owners and buyers, and boarders, related adults and group members living in rented public housing are twice as likely to be overcrowded as those in other types of tenure (Figure 4.2). Nevertheless, overcrowding is a relatively rare occurrence for the non-indigenous population in any tenure. Specifically, 0.3 per cent of the non-indigenous elementary families in dwellings which are owned or being purchased are overcrowded secondary families, and 2.6 per cent are primary families in housing stress. In rented dwellings, the corresponding proportions are 0.5 and 5.3 per cent respectively, with families in private rental housing being a little more likely than those in government housing to be in housing stress. One-fifth of single adults sharing rented government housing are in overcrowded dwellings, compared with one-tenth of those in other tenures.

Relative to the non-indigenous population, indigenous home buyers are the least disadvantaged, although the level of housing need is still two to three times that of the non-indigenous population. In owned dwellings, homelessness affects 2.9 per cent of indigenous families, ten times the level of non-indigenous families, and family housing stress (9.7 per cent) and adult housing need (36 per cent) are almost four times the levels of non-indigenous families and adults (2.6 and 10 per cent respectively). Similarly, in rented government housing, 3.1 per cent of indigenous elementary families share overcrowded dwellings, six times the level found among non-indigenous families (0.5 per cent), while family housing stress (11.6 per cent) and other adult housing need (48 per cent) are two and a half times more likely than for the non-indigenous population.

In other rented housing, family homelessness and housing stress affect about 10 and 20 per cent respectively of indigenous families, compared to about 0.5 and 5 per cent respectively of non-indigenous families. About half of indigenous single adults in this tenure category are in housing need, five times the level of non-indigenous adults. Comparisons for the undefined other tenure category may not be appropriate, since they may reflect different tenure distributions of the two populations. In both cases, however, they appear more likely to be tenants

than home owners or home purchasers and the differences in housing need are broadly similar to those of tenants.

The indigenous population comprises only a small proportion of the population in each State and Territory except the Northern Territory, where the indigenous population is one-fifth of all families and one-third of other adults (Table 4.4). Improvised housing and shared housing accounts for five-sixths of homeless indigenous families in the Territory, and two-thirds of the Territory's family housing stress and other adult housing need is also attributed to the indigenous population.

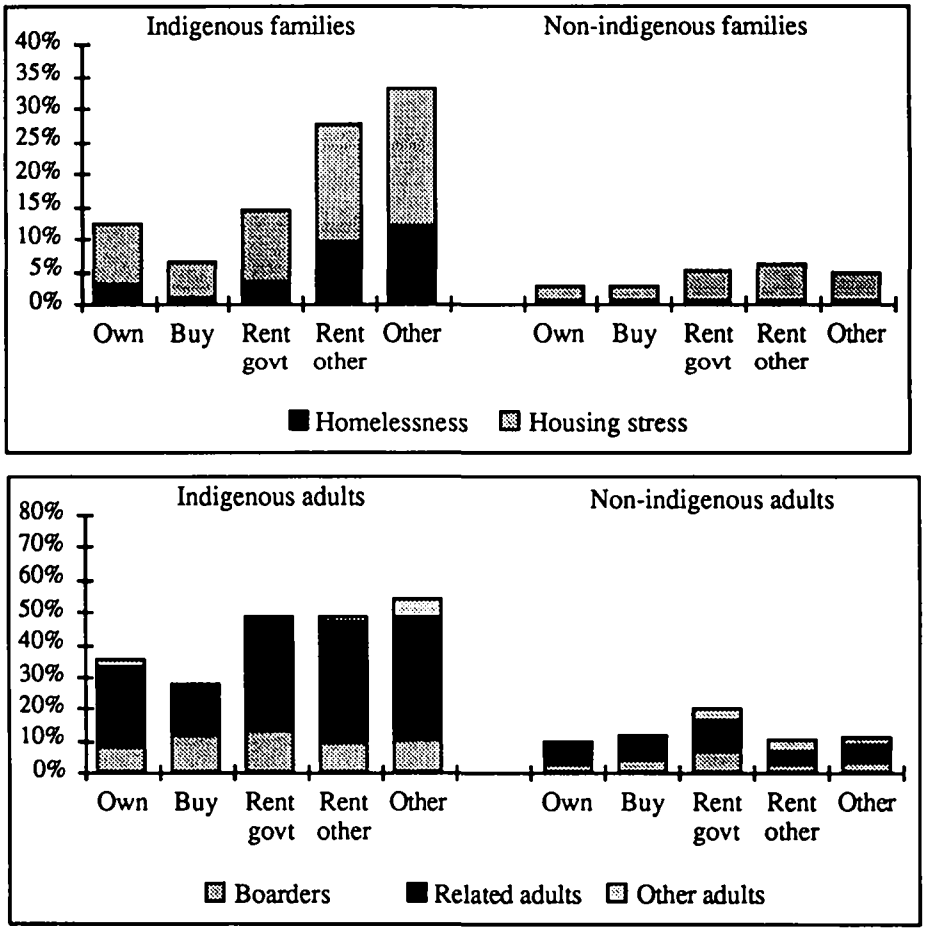
The indigenous populations of Queensland, South Australia and Western Australia are also substantially overrepresented among those in housing need. Over half the homeless families in Western Australia and more than one-quarter of those in Queensland and South Australia are indigenous. This association between the indigenous population and poor housing conditions is also reflected in their share of family housing stress and other adult housing need in these States. The indigenous populations of the other States (and the Australian Capital Territory) are less disadvantaged in comparison, although their contribution to total housing need is still two to three times their proportion in the population.

Comparisons of the proportion of the non-indigenous population in housing need between States and Territories show some variation, although it remains relatively uncommon in all cases (Figure 4.3). New South Wales has a slightly higher than average level of homelessness, 0.5 per cent, and lower than average levels of about 0.2 per cent occur in South Australia, Western Australia and the Australian Capital Territory. The Northern Territory stands out, with 1.2 per cent of non-indigenous families in this category. A similar pattern is evident for non-indigenous family housing stress and other adult housing need. Housing stress is again highest in the Northern Territory (4.1 per cent) and New South Wales (3.9 per cent) and lowest in South Australia (2.3 per cent), Western Australia (2.0 per cent) and the Australian Capital Territory (1.3 per cent). For other adults, the Northern Territory exhibits a higher proportion in housing need than in the States, the majority of which is the result of overcrowding in group households.

In all States and Territories however, the housing disadvantage of the indigenous population relative to the non-indigenous population is clearly evident. Family homelessness among indigenous people is particularly severe in Queensland (6.9 per cent), South Australia (9.0 per cent), Western Australia (11.5 per cent) and the Northern Territory (28.7 per cent). Indigenous populations in these regions also have high levels of family housing stress. In Western Australia, the proportion of indigenous families in housing stress (13.4 per cent) is almost seven times that of non-indigenous families, while Queensland (15.8 per cent), the Northern Territory (21.6 per cent) and South Australia (8.6 per cent) show levels of housing stress respectively 5, 5 and almost 4 times higher for indigenous families than for non-indigenous families. Indigenous families in Victoria

and Tasmania are the least disadvantaged, their housing need being only twice that of other families in the State.

Figure 4.2. Per cent of indigenous and non-indigenous families and other adults in housing need by tenure: non-improvised dwellings.[a]



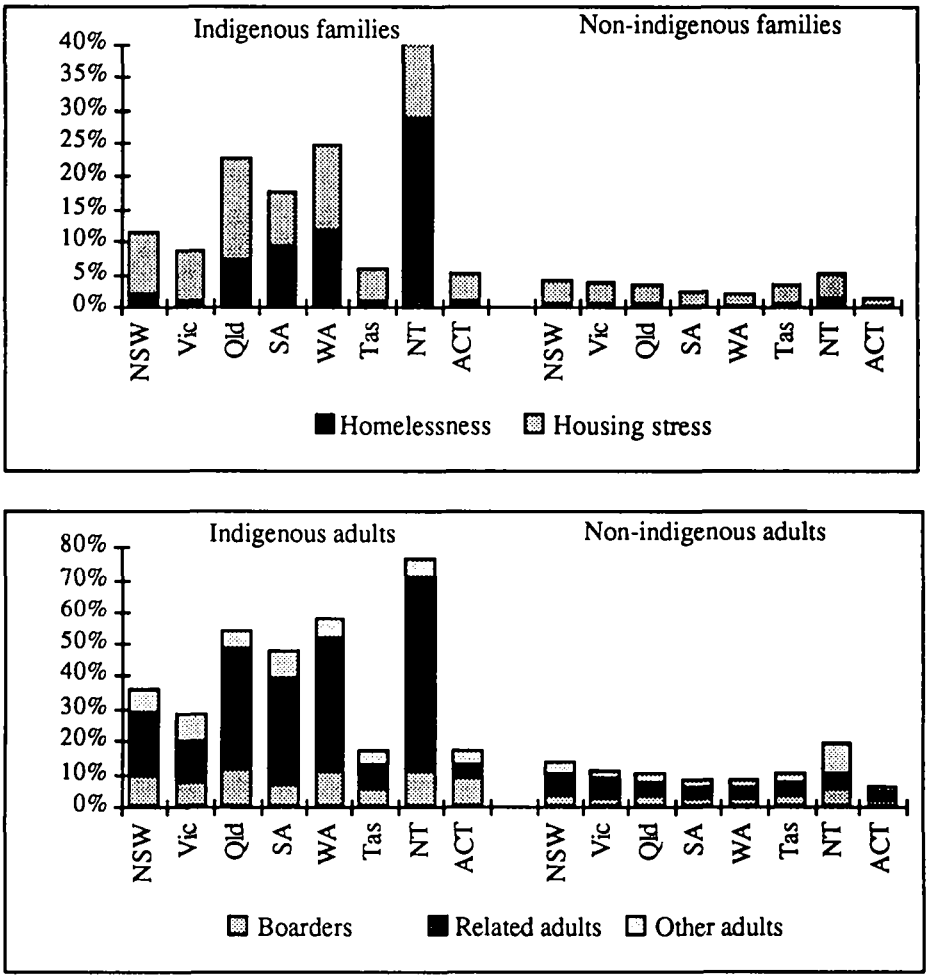
a. For per cent of families in each tenure category in family homelessness and family housing stress. For boarders, related adults and group/other adults, the number in housing need expressed as a per cent of the combined total number of all these adults in each tenure category.

Sources: Table 2.11, Table 2.12 and Table 4.3.

In summary, homelessness and overcrowding in Aboriginal and Torres Strait Islander households is substantially higher than for the remainder of the Australian population. At the national level, 8 per cent of indigenous families live in improvised dwellings or share overcrowded housing with other families, a proportion 20 times that of non-indigenous families. In addition, the proportions of indigenous people in family housing stress and other adult housing need from overcrowding are four times those of the non-indigenous population.

Higher than average levels of housing need for the indigenous population are associated with living in rural and remote areas and in rented housing, particularly non-government rental. The association of these conditions with a higher than average concentration of the indigenous population explains to some extent the higher levels of housing need in Queensland, South Australia, Western Australia and the Northern Territory. These conditions, however, have little effect on the adequacy of housing for the non-indigenous population.

Figure 4.3. Per cent of indigenous and non-indigenous families and other adults in housing need by State/Territory.[a,b]



a. The per cent of families in each State/Territory category in family homelessness and family housing stress. For boarders, related adults and group/other adults, the number in housing need expressed as a percentage of the combined total number of all these adults in each State/Territory category.

b. The proportion of families in housing stress in the Northern Territory is 21.6 per cent, bringing the total level of family housing need to 50 per cent.

Sources: Table 2.14 and Table 4.4.

The difference in housing need between the indigenous and non-indigenous populations is also, in part, a reflection of differences in household composition and family size. Other census results (ABS 1993) indicate that 94.1 per cent of the indigenous population in private dwellings live in family households compared with 88.8 per cent of the non-indigenous population, while 12.5 and 1.6 per cent respectively live in multi-family households. The remaining adults live in group and lone person households, representing 5.9 and 11.2 per cent of indigenous and non-indigenous populations respectively. This difference results from indigenous adults being more likely to live with a related family than in a group or lone person household. One in seven (14.1 per cent) indigenous families have relatives present in the household compared to 3.8 per cent of non-indigenous families.

Indigenous families are also larger, on average, than non-indigenous families. Two-fifths of the indigenous population is aged 14 years or less, compared with a little over one-fifth (22 per cent) of the non-indigenous population, and almost three-quarters (73 per cent) of indigenous families include dependent off-spring compared to just over half (53 per cent) of non-indigenous families. Couples with no children account for 15 per cent of indigenous families, compared with 31 per cent of non-indigenous families. Larger family sizes, and the higher level of sharing with other families and other adults, result in the average size of indigenous households being substantially larger than that of non-indigenous households, 4.6 persons compared with 2.6 persons (ABS 1993).

The higher proportion of secondary families living in overcrowded dwellings, and therefore assessed as homeless, is thus partly due to the higher proportion of multi-family households in the indigenous population. Similarly, the higher proportion of boarders and, more particularly, related adults in housing need reflects a greater tendency for indigenous adults to live with a related family. The larger than average size of indigenous families increases the likelihood of primary family housing stress and that secondary families, boarders and related family adults are overcrowded.

The achievement of housing equality with other Australians is contingent on reducing the reliance of indigenous families and other adults on shared family housing. Better access to government housing or to other subsidised rental housing made available through community-based housing association schemes is required in the majority of cases. As discussed in the previous chapter, most homeless families and single adults in housing need have incomes below or marginally above the poverty level and could not afford to purchase or rent adequate housing in the private sector.

The provision of indigenous housing also needs to take account of the relatively high birth rates among indigenous people which result in larger, younger families. Higher rates of indigenous family housing stress suggest that indigenous families are less able to adjust their dwelling size to meet the requirements of family growth. This is consistent with the low

income status of many indigenous families in private rental housing, and the reliance on adequate housing being provided by State and Territory housing authorities. Nevertheless, it seems reasonable to expect, in public housing at least, a similar level of housing stress among indigenous and non-indigenous families, rather than the current situation where indigenous families are more than twice as likely to be overcrowded as non-indigenous families.

Table 4.2. Total population and housing need and per cent indigenous by section-of-State.

	Family units/persons and per cent indigenous by section-of-State					
	Major urban		Other urban		Rural	
	Total number	Per cent indigenous	Total number	Per cent indigenous	Total number	Per cent indigenous
Eligible population						
Elementary families	2,616,630	0.7	936,970	2.6	625,005	2.7
Boarders	79,596	1.4	23,078	7.0	15,426	9.7
Related adults	257,257	1.0	62,492	8.6	41,798	16.9
Group/other adults	379,529	0.8	96,984	2.1	37,329	3.4
Family homelessness and bedroom need						
Total families	10,726	2.0	3,197	34.3	7,179	47.2
Total bedroom need	19,577	2.1	6,480	37.2	15,138	52.8
Family housing stress and bedroom need						
Total families	86,357	1.6	27,994	10.8	26,150	11.9
Total bedroom need	98,398	1.7	31,991	13.1	31,485	16.3
Other adult housing need						
Boarders	24,212	2.2	7,506	13.8	5,230	22.2
Related adults	38,251	2.3	8,836	31.3	9,212	57.1
Group/other adults	24,569	2.4	5,983	9.4	4,586	12.7
Total bedroom need	87,032	2.3	22,325	19.6	19,028	36.8
Total bedroom need	204,999	2.0	60,796	18.0	65,651	30.7

Sources: 1991 Census of Population and Housing and results in Table 2.10.

Table 4.3. Indigenous population and housing need as per cent of total population and total housing need by tenure.[a]

	Family units/persons and per cent indigenous by housing tenure											
	Owned		Buying		Rented gov't		Rented other		Other N/S		Improvised	
	Total number	% indig	Total number	% indig	Total number	% indig	Total number	% indig	Total number	% indig	Total number	% indig
Eligible population												
Elementary families	1,741,033	0.4	1,362,557	0.7	278,471	6.5	643,103	3.1	149,041	1.7	4,400	38.3
Boarders	27,129	1.4	28,902	1.3	9,451	12.4	47,489	4.0	4,810	4.8	319	70.8
Related adults	150,255	0.6	80,229	0.7	24,592	16.4	87,347	8.3	17,770	5.2	1,354	92.1
Group/other adults	68,141	0.6	76,089	0.5	25,099	2.8	316,767	1.0	18,347	2.0	2,792	15.0
Family homelessness and bedroom need												
Total families	4,969	3.7	4,106	2.0	1,913	29.5	4,798	39.0	916	33.3	4,400	38.3
Total bedroom need	9,201	4.3	7,618	2.2	3,696	32.0	9,449	45.4	1,700	44.2	9,449	46.7
Family housing stress and bedroom need												
Total families	44,825	1.4	35,301	1.6	14,060	14.9	39,402	9.4	6,913	8.0	n.a.	
Total bedroom need	51,501	1.8	40,138	1.7	16,505	16.8	45,473	12.7	8,257	10.5	n.a.	
Other adult housing need												
Boarders	6,992	2.1	7,784	2.1	4,583	17.2	15,774	7.9	1,496	10.6	319	70.8
Related adults	15,144	2.8	12,486	1.6	6,845	29.2	17,829	25.2	2,641	21.5	1,354	92.1
Group/other adults	1,874	2.4	1,784	1.0	2,111	3.6	18,741	1.6	1,229	7.9	2,792	15.0
Total bedroom need	24,010	2.5	22,054	1.7	13,539	21.2	52,344	11.5	5,366	15.3	4,465	42.4
Total bedroom need	84,712	2.3	69,810	1.8	33740	20.2	107,258	15.0	15,323	15.9	13,996	45.0

n.a. not applicable.

a. The results in Table 2.11 and 2.12 which provide the numerator for computing percentages include improvised dwellings in some cases. Those figures have therefore been adjusted where necessary to give separate results for the improvised dwellings component.

Sources: 1991 Census of Population and Housing and results in Tables 2.11 and 2.12.

Table 4.4. Indigenous population and housing need as per cent of total population and total housing need by State/Territory.

	Family units/persons and per cent indigenous by State/Territory													
	NSW & ACT		VIC		QLD		SA		WA		TAS		NT	
	Total number	% indig	Total number	% indig	Total number	% indig	Total number	% indig	Total number	% indig	Total number	% indig	Total number	% indig
Eligible population														
Elementary families	1,485,594	1.2	1,062,244	0.4	720,630	2.1	365,663	1.0	392,680	2.1	117,522	2.3	34,272	20.9
Boarders	45,643	2.4	25,453	1.0	24,440	5.3	7,705	2.7	10,178	6.8	2,283	2.7	2,398	27.7
Related adults	144,246	2.0	91,609	0.6	60,990	7.1	23,924	3.6	28,801	9.0	6,434	2.0	5,543	67.2
Group/other adults	192,613	1.0	122,436	0.5	94,455	1.6	37,981	1.1	49,184	1.7	10,135	1.8	7,038	9.3
Family homelessness and bedroom need														
Total families	7,279	4.1	4,164	0.9	3,886	26.8	1,163	27.5	1,832	51.3	409	4.2	2,369	86.5
Total bedroom need	13,441	4.5	7,593	0.9	7,774	30.9	2,296	32.3	3,971	55.1	757	4.1	5,363	89.2
Family housing stress and bedroom need,														
Total families	56,856	3.0	36,036	0.9	23,907	10.0	8,641	3.6	8,778	12.4	3,629	4.0	2,654	58.3
Total bedroom need	64,815	3.3	41,121	1.0	28,045	12.8	9,696	4.3	10,198	15.7	4,048	4.2	3,951	68.4
Other adult housing need														
Boarders	15,094	3.9	7,851	1.4	7,382	11.9	2,020	5.3	2,745	17.3	703	3.1	1,153	48.8
Related adults	23,714	4.6	13,263	1.3	8,666	29.5	2,696	17.3	3,980	40.7	620	3.9	3,360	89.2
Group/other adults	15,546	2.7	6,560	1.9	6,429	7.0	1,838	7.0	2,755	10.3	690	2.9	1,320	23.1
Total bedroom need	54,354	3.8	27,674	1.4	22,477	17.3	6,554	10.7	9,480	25.1	2,013	3.3	5,833	66.2
Total bedroom need	132,602	3.6	76,388	1.1	58,296	16.9	18,546	10.0	23,649	26.1	6,818	3.9	15,147	74.9

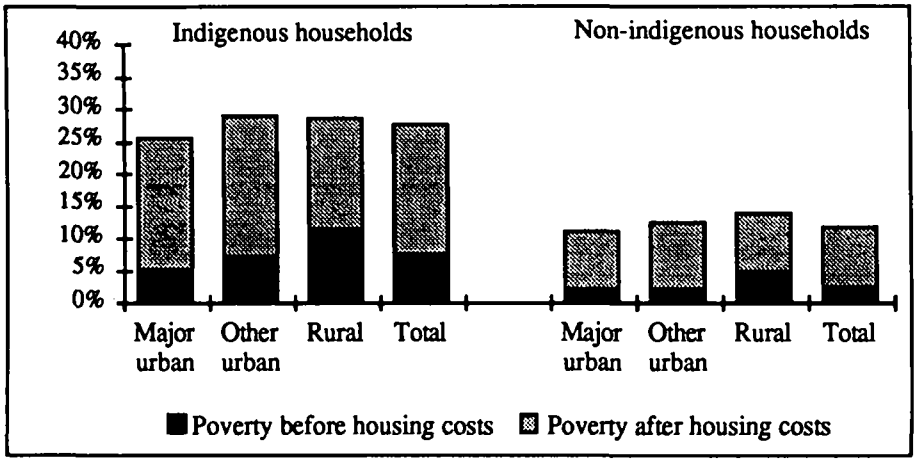
Sources: 1991 Census of Population and Housing and results in Table 2.14.

After-housing poverty comparisons

The level of after-housing poverty in non-indigenous households by section-of-State, tenure and State and Territory is shown in Table 4.5 at the end of this section, in a form comparable to the results for the indigenous population given previously in Tables 3.5, 3.16 and 3.17. Comparisons of the two populations, showing the percentage of households in after housing poverty in each category, are illustrated in Figures 4.4 to 4.6. Households in improvised dwellings, indigenous and non-indigenous, are excluded from the comparisons.

At the national level, the level of after-housing poverty for the indigenous population is estimated as 27 per cent of (non-improvised) households, with 7 per cent of these households having net incomes below their AHPL even before housing costs are taken into account. The corresponding proportions for the non-indigenous population are 12 and 2 per cent respectively. Numerically, some 19,000 of the 69,000 indigenous households in Australia are assessed as being in after housing poverty, compared with about 651,000 of the 5,546,000 non-indigenous households.

Figure 4.4. Per cent of indigenous and non-indigenous households in after-housing poverty by section-of-State.

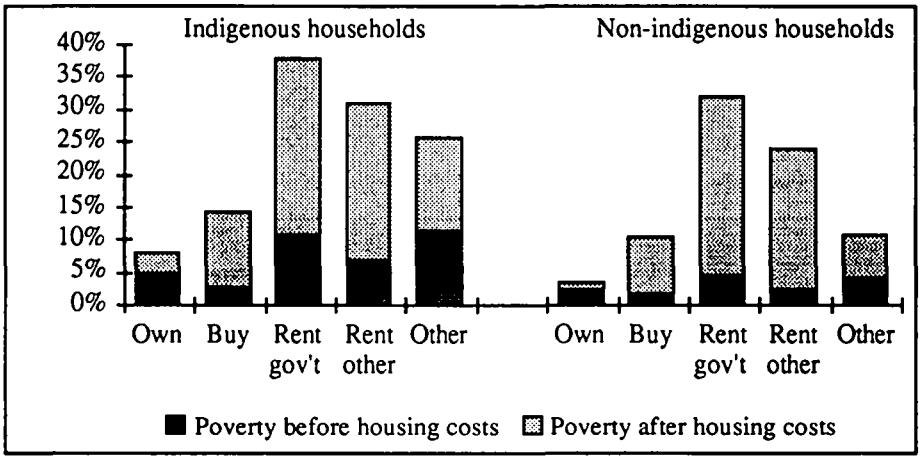


Sources: Table 3.16 and Table 4.5.

After-housing poverty is higher outside the major urban centres for both indigenous and non-indigenous populations, although not greatly (Figure 4.4). This is due to higher proportions of households in poverty before housing costs, more particularly in rural areas, and a higher proportion of households in poverty after housing costs in other urban centres. For the indigenous population, the proportion of households in poverty before housing costs increases from 5 per cent in major urban centres to 7 per cent in other urban areas and 11 per cent in rural areas, while the poverty of

non-indigenous households increases from just under 2 per cent in both major urban and other urban areas to 4.6 per cent in rural areas. The probability of indigenous households being taken into poverty by housing costs is about twice that of non-indigenous households across all three section-of-State categories.

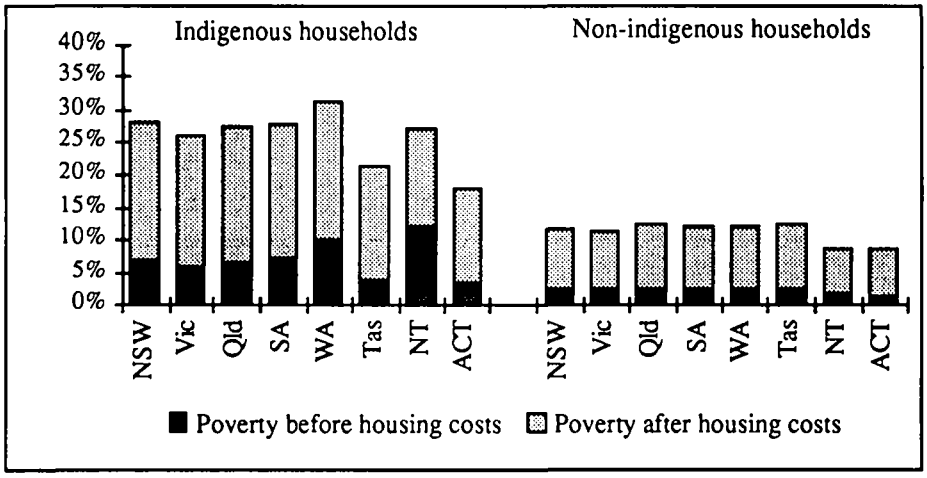
Figure 4.5. Per cent of indigenous and non-indigenous households in after-housing poverty by tenure.[a]



a. The owned households in the poverty after housing costs category have after-tax income equal to their AHPL within the income categories allowed by the census data. Half of these households are assumed to be in poverty, but they are included in the poverty after housing costs category to maintain consistency across tenures in the definition of poverty before housing costs.

Sources: Table 3.5 and Table 4.6.

Figure 4.6. Per cent of indigenous and non-indigenous households in after-housing poverty by State/Territory.



Sources: Table 3.17 and Table 4.7.

The difference between the indigenous and non-indigenous populations in the level of poverty after housing costs is largely explained by differences in household tenure (Figure 4.5). Within the home buyer, rented government housing and other rented housing tenure categories, the proportion of households in poverty after housing costs is similar in both populations. For home buyers, 12 per cent of indigenous households are taken into poverty by mortgage repayments, compared with 9 per cent of non-indigenous households. Among presumably lower income households renting government dwellings, 28 per cent of both populations suffer poverty because of housing costs, while the corresponding proportions in other rented housing are 24 per cent for indigenous households and 22 per cent for non-indigenous households. However, the level of poverty before housing costs remains consistently two to three times higher among the indigenous population across all tenures, the highest proportion in both populations being among those in rented government housing.

Figure 4.6 compares the levels of after-housing poverty of indigenous and non-indigenous populations by State and Territory. For the *non-indigenous population*, the level of after-housing poverty varies little between States, with just over 2 per cent of households in poverty before housing costs and about 10 per cent in poverty after housing costs. The after-housing poverty level is lower in the two Territories, with a little over 1 per cent in poverty before housing costs and a further 7.4 per cent in poverty after housing costs. For the indigenous population, poverty before housing costs is higher than average in Western Australia (9.5 per cent) and the Northern Territory (11.8 per cent) and below average in Tasmania (3.4 per cent) and the Australian Capital Territory (3.2 per cent). Tasmania and the two Territories also have lower levels of poverty after housing costs than the other States.

The overrepresentation of indigenous households among those in poverty before housing costs reflects the disparity in income levels between the two populations. Almost two-thirds of indigenous adults (63.5 per cent) reported income under $12,000 per year in the census compared with 45 per cent of non-indigenous adults. The corresponding proportions reporting incomes under $8,000 per year are 46 and 34 per cent respectively. Indigenous adult incomes are also lower outside the capital cities, a pattern reflected in higher poverty levels outside the major urban centres (ABS 1993).

Three-quarters of indigenous adults in the Northern Territory have incomes below $12,000, compared with 69 per cent in Western Australia, between 53 per cent and 64 per cent in the other States, and 41 per cent in the Australian Capital Territory. For non-indigenous adults, this proportion is similar in all States, varying between 44 and 49 per cent, falling to one-third in the two Territories.

The higher level of poverty before housing costs thus reflects income inequality between the indigenous and non-indigenous population. This inequality is not, however, evident in higher levels of poverty after housing

costs once housing tenure is taken into account. In rented housing in particular, it seems that indigenous households are no more likely than others to suffer poverty because of housing costs.

The number of indigenous family households in poverty after housing costs is reduced to some degree by the sharing of housing and incomes between families and related adults. As shown by the results in Tables 3.8 and 3.9 in the previous chapter, rehousing secondary families and other adults in overcrowded family dwellings would increase by half the after-housing poverty level in these households, increasing the proportion of indigenous households in after-housing poverty from 38 to 42 per cent in rented government housing and from 31 to 35 per cent in other rented housing.

In rented government housing, the similarity in poverty levels between indigenous and non-indigenous households is perhaps not surprising, since tenants are expected to have low incomes, more similar to those of indigenous tenants, and rental costs are determined on the basis of affordability criteria. The fact that such a high proportion of public housing tenants, both indigenous and non-indigenous, are in after-housing poverty appears as further evidence that the housing costs to income ratio approach to determining affordable housing costs is inappropriate when applied to low income families.

In other types of rental housing, however, the similarity in levels of poverty after housing costs between the indigenous and non-indigenous tenants is unexpected. While further investigation is beyond the scope of this analysis, one important difference between the two populations should be noted. For the indigenous population, Aboriginal community-based housing associations provide about two-fifths of the dwellings in this category. To the extent that these households are less likely than others in this category to suffer after-housing poverty, those reliant on the private rental market are more likely to lack the financial resources to meet their housing and other essential costs.

Table 4.5. Non-indigenous households in after-housing poverty by section-of-State, tenure and State/Territory.[a,b]

	Total dwellings	Income < AHPL		Income < AHPL plus housing costs		Total in after-housing poverty	
	Number	Number	%	Number	%	Number	%
Section-of-State							
Major urban	3,562,951	60,658	1.7	331,066	9.3	391,724	11.0
Other urban	1,236,183	23,140	1.9	131,361	10.6	154,501	12.5
Rural	747,326	34,274	4.6	70,460	9.4	104,734	14.0
Total	5,546,460	118,072	2.1	532,887	9.6	650,959	11.7
Tenure							
Owned	2,308,820	47,365	2.1	34,551	1.5	81,916	3.5
Buying	1,537,796	23,099	1.5	139,122	9.0	162,221	10.5
Rented: gov't	272,725	15,333	4.1	104,625	28.0	119,958	32.1
other	1,080,541	22,613	2.1	238,104	22.0	260,717	24.1
Other	245,578	9,855	4.0	16,858	6.9	26,713	10.9
Total	5,546,460	118,265	2.1	533,260	9.6	651,525	11.7
State/Territory							
NSW	1,889,725	39,328	2.1	180,255	9.5	219,583	11.6
Victoria	1,423,695	31,209	2.2	131,533	9.2	162,742	11.4
Queensland	940,881	20,643	2.2	95,618	10.2	116,261	12.4
SA	495,488	10,298	2.1	48,983	9.9	59,281	12.0
WA	515,869	11,151	2.2	51,555	10.0	62,706	12.2
Tasmania	154,637	3,242	2.1	15,850	10.2	19,092	12.3
NT	37,188	509	1.4	2,742	7.4	3,251	8.7
ACT	88,977	1,107	1.2	6,560	7.4	7,667	8.6
Total	5,546,460	117,487	2.1	533,096	9.6	650,583	11.7

a. The estimates include dwellings with missing income or housing costs data, which are distributed proportionately across the appropriate income categories. Minor variations between tables result from estimation and rounding procedures.

b. Owned households in the poverty after housing costs category have after-tax income equal to their AHPL within the income categories allowed by the census data. Half of these households are assumed to be in poverty, but are included in the poverty after housing costs category to maintain consistency across tenures in the definition of poverty before housing costs.

Source: 1991 Census of Population and Housing.

5. Comparison of housing stress between the 1986 and 1991 Censuses

Comparisons between population censuses provide essential measures of change in the demographic characteristics and circumstances of subgroups in the population. They are particularly important when applied to subgroups of the population such as Aboriginal and Torres Strait Islander people, whose representation in most other data collections is generally so small that any conclusions about them can be, at best, only tentative. In making such comparisons, however, it must be recognised that the Census of Population and Housing is not a static measuring instrument which remains unchanged from one census to the next. Various changes are made to improve the coverage of the population, to refine and simplify the questions, and to improve the utility of the classifications which are used in tabulating and reporting the data. Because of these changes, direct comparisons of estimates from one census to another must be made with some care.

This is particularly true of comparisons made of the characteristics of the indigenous population, where even the identification of the population may differ from one census to the next. The classification of a person, family or household as indigenous relies on persons identifying themselves as being in this category. As a result, growth in the indigenous population may not only be a result of natural increase, but also a greater willingness of members of the indigenous population to self-identify. Other factors, such as improved coverage of the indigenous population in remote areas, also affect the characteristics of the indigenous population reported in the census.

Household and family comparisons between the 1986 and 1991 Censuses are particularly affected by differences in the treatment of visitors between the two collections. For the first time, the 1991 Census identified visitors to households and excluded them from the household and family classifications. As the *1991 Census Dictionary* states, this change was implemented to meet:

> the requirement for more accurate data, and simpler and more relevant classifications reflecting the usual family and household structure, at the expense of comparability with previous censuses. ... To exclude all visitors from household and family classifications ... affects the comparability of family counts, family structures in holiday homes, group and lone person households, with the 1986 Census (ABS 1991: 48).

In the 1986 Census, an independent adult visitor to a family dwelling was classified as a boarder, if unrelated, or as a related family adult. A visiting family was classified as a secondary family. A visitor to a group household was simply treated as an additional group member or, if related to a group member, resulted in the group household being classified as a family of

related adults with other adults present. A visiting family also revised the classification to a family dwelling. Similarly, visitors to a lone person household resulted in the household being classified as a group or a family dwelling. Visitor only households were also included in the classifications. Since visitors might have been recorded as temporarily absent from another household, their inclusion in the household they were visiting could also give rise to double counting in the assessment of housing need.

The change in the treatment of visitors implemented in the 1991 Census is clearly desirable and reflects much more accurately the permanent status of the household. The inclusion of visitors in the 1986 Census classifications increased, to an unknown extent, the number of family, and multi-family households and the number of boarders and related adults present, reduced lone person households, and may have increased or decreased the number of group households. In the context of this analysis, therefore, visitors increase the level of overcrowding and the bedroom need of indigenous households and may affect, probably reducing, household after-housing poverty levels.

An assessment of the impact of visitors is thus an essential prerequisite to the examination of changes in housing need between the 1986 and 1991 Censuses. This analysis is reported below and indicates that visitors do have a significant effect on the assessment of overcrowding. Changes between the two censuses cannot, therefore, be determined accurately. The only option is to include visitors in the 1991 analyses for comparison with the 1986 estimates, and assume that any change in housing need is not the result of changes in visitor characteristics. Subject to these caveats, the results in this chapter compare indigenous housing need and after-housing poverty between the 1986 and 1991 Censuses by tenure, section-of-State, State and Territory and regional council. As far as is possible, the results are derived using comparable definitions of indigenous households, families and other adults.

The effect of visitors on the estimates of overcrowding in indigenous households

Table 5.1 shows the population and housing need of indigenous households identified from analyses of the 1986 and 1991 Censuses, and the percentage change of 1991 Census figures from those in the 1986 Census. In both cases, the results have been calculated using the procedures discussed earlier in Chapter 2. For the 1991 Census analysis therefore, visitors are excluded from the household and family classifications and from the assessment of overcrowding and housing need, while they are included in the 1986 Census assessment.

These comparisons suggest a significant improvement in the housing conditions of the indigenous population, with substantial reductions in the number of secondary families, boarders and related adults sharing family dwellings reflected in significantly lower estimates of family homelessness

and other adults housing need. Family homelessness showed a substantial decline, due to both fewer families living in improvised dwellings and to fewer secondary families sharing overcrowded housing. The number of families in improvised dwellings fell by almost one-quarter (23 per cent) and the number of secondary families sharing overcrowded housing fell by almost half (44 per cent). The level of primary family housing stress appeared unchanged, affecting about 7,500 families with a total need of about 11,000 bedrooms.

Table 5.1. Indigenous population and housing need, 1986 and 1991 Censuses.

Eligible population/ housing need	Family units/persons 1986	1991	Percentage point change
Eligible population			
Elementary families	49,774	58,689	+18
Boarders	6,259	4,264	-32
Related adults	19,311	15,030	-22
Group members	4,247	5,200	+22
Other adults	851	971	+14
Family homelessness and bedroom need			
Improvised dwelling	2,182	1,687	-23
Second or third family	5,423	3,013	-44
Total families	7,605	4,700	-38
one bedroom household	1,729	925	-47
two bedroom household	4,342	2,338	-46
three bedroom household	1,150	923	-20
four+ bedroom household	384	514	+34
Total bedroom need	15,622	10,823	-31
Family housing stress and bedroom need			
Total families	7,425	7,523	+1
one additional bedroom	4,946	5,273	+7
two additional bedrooms	1,658	1,483	-11
three additional bedrooms	548	480	-12
four+ additional bedrooms	273	287	+5
Total bedroom need	11,166	10,995	-2
Other adults housing need			
Improvised dwelling	1,985	1,892	-5
Other dwellings	13,723	11,495	-16
Total bedroom need	15,708	13,387	-15
Boarders	4,391	2,735	-38
Related adults	9,746	8,922	-8
Group/other adults	1,571	1,730	+10
Total bedroom need	42,493	35,205	-17

Sources: 1986 Census of Population and Housing and results in Table 2.9.

Reductions of one-third (32 per cent) and one-fifth (22 per cent) in the number of boarders and related adults lowered housing need in these categories by 38 and 8 per cent respectively. Group household membership increased by one-fifth (22 per cent) with a small increase, from 720 to 759 (5 per cent), for those in overcrowded dwellings. Indigenous lone person dwellings also increased, from 4,207 to 6,405 (52 per cent), with a reduction of those in improvised dwellings from 241 to 188 persons (22 per cent). The only figure which did not show a positive trend at the national level between the two censuses was the increase, from 610 to 783, in the number of indigenous adults identified in hostels for the homeless, night shelters and refuges.

It is not possible to assess precisely the extent to which the 1986 figures are affected by the presence of visitors, since visitors were not identified. The 1991 Census, however, recorded the number and characteristics of individual visitors, though not their relationships with other visitors or other household members. An estimate of the total bedroom need of indigenous households with visitors present can therefore be derived, although not in a form which allows identification of the components associated with family homelessness, family housing stress and other adults housing need.

The effect of visitors on the assessment of the total bedroom need of indigenous households in the 1991 Census is shown in Table 5.2. The estimates are obtained by adding the bedroom requirement of visitors to that of residents and, if the dwelling is overcrowded, identifying the increase in total bedroom need associated with their inclusion in the household. The bedroom requirement of visitors is defined to be one bedroom for each visiting adult, with up to two visiting dependents allowed to share. Since no account is taken of the relationships between visitors or between visitors and household members, these bedroom requirements may overstate a little the allocation that similar numbers and types of visitors receive in the 1986 Census analyses. On the other hand, the 1991 Census analysis shows only the effects of visitors on households with indigenous residents, while the 1986 data include some visitor only households (1 per cent of indigenous households in 1991) and some non-indigenous households with indigenous visitors.

In improvised dwellings, all residents are defined to be in housing need, and the presence of visitors in 122 improvised dwellings increases the bedroom need by 246, raising the total from 6,306 to 6,552 bedrooms. Lone person households are assumed not to be overcrowded, but the inclusion of visitors changes the household type to a family or group household. Of the 599 households with visitors present on census night, 207 are assessed as being overcrowded, resulting in the addition of 296 to the bedroom need. The other 62,994 family and group households have a bedroom need of 28,116 when visitors are excluded from consideration. However, 5,804, or almost one in ten of these dwellings, had visitors present on census night, increasing the number of dwellings assessed as

overcrowded by one-sixth, from 14,871 to 17,317 households, and bedroom need by one-fifth, to 34,043 bedrooms.

Table 5.2. The effect of visitors on overcrowding and total bedroom need in indigenous households, 1991 Census.

	Improvised dwellings	Lone person households	Family/group households	Total
Total dwellings	1,718	6,217	62,994	70,929
Visitors excluded				
Overcrowded dwellings	1,718	0	14,871	16,589
Total bedroom need	6,306	0	28,116	34,422
Visitors included				
Dwellings with visitors	122	599	5,804	6,525
Overcrowded dwellings	1,718	207	17,317	19,242
Total bedroom need	6,552	296	34,043	40,891

Source: 1991 Census of Population and Housing.

Table 5.3. The estimated effect of visitors on overcrowding and total bedroom need in indigenous households, 1986 Census.

	Improvised dwellings	Lone person households[a]	Family/group households	Total
Total dwellings	1,903	4,389	51,049	57,341
Visitors included				
Total bedroom need	7,091	209	34,583	41,883
Visitors excluded				
Total bedroom need	6,825	0	28,562	35,387

a. The number of lone person households identified in the 1986 Census was 3,699, which is adjusted to 4,389 on the assumption that the proportion with visitors is similar to 1991. The additional 690 households are then subtracted from the count of family/group households.

Source: 1986 Census of Population and Housing estimates, adjusted as discussed in the text.

Overall, the effect of including visitors in the 1991 Census assessment increases the number of overcrowded dwellings (including improvised dwellings) by 16 per cent and total bedroom need by 19 per cent. Comparison of the estimated total need of 40,891 bedrooms with the 1986 estimate of 41,883 bedrooms (42,493 minus 610 associated with adults in non-private dwellings) suggests that there has been little change in indigenous housing need between the censuses.

This comparison assumes a similar pattern of visitors in the two censuses, and a similar effect on housing need. In that case, the bedroom need obtained from the 1986 Census can be adjusted proportionately to exclude visitors, giving the estimates shown in Table 5.3. The overall effect is a reduction of 6,500 (15.5 per cent) in total bedroom need, an estimate of the effect that visitors to indigenous households had on overcrowding on census night. The difference in total bedroom need between censuses is then less than 1,000 bedrooms, a reduction of less than 3 per cent.

Some caution is clearly warranted in the interpretation of these results. A higher proportion of visitors in 1986 than in 1991 would increase their share of the total bedroom need assessment, with the result that the additional bedroom need of residents would be lower, perhaps below the 1991 Census level. On the other hand, fewer visitors in 1986 than in 1991 would increase the difference between the censuses in the bedroom need of indigenous residents and show a more substantial improvement in housing conditions. With no visitors contributing to overcrowding in 1986, the results in Table 5.1 would stand. Given the number of households accommodating visitors in the 1991 Census, however, this would seem to give an excessively optimistic assessment of the improvement in indigenous housing conditions.

There are, nevertheless, some changes in indigenous housing conditions which can be identified more precisely and are consistent with some reduction in the level of housing need. First, the number of indigenous households living in improvised dwellings declined from 1,903 in 1986 to 1,718 in 1991. Second, the number of indigenous lone person households (in non-improvised dwellings and excluding full-time students living alone) increased by an estimated 1,800 between the censuses. Third, the number of indigenous family and group households increased by almost 12,000, or 23 per cent, from around 51,000 to 63,000, while the indigenous population increased by 16.6 per cent nationally. Group households increased by about 800 to 4,200, in line with the increase of 22 per cent in indigenous group members, and the rise of about 11,200 in the number of family households more than compensates for an additional 9,000 indigenous elementary families.

In summary, direct comparisons between the censuses show large reductions in the numbers of boarders, related adults and secondary families and corresponding reductions in housing need. These are, however, precisely the groups into which most visitors would have been classified in the 1986 Census. When visitors are included in the 1991 Census assessment, the comparison with 1986 shows little change, suggesting that indigenous housing provision over the period has just kept pace with family growth and family formation and had minimal impact on reducing the backlog of housing need. On the other hand, increases in the number of indigenous adults in group and lone person households and in family housing suggest improved housing conditions. Unfortunately, the

confounding effects of visitors, population change and additional housing leave a considerable degree of uncertainty as to exactly what has been achieved.

In view of this uncertainty, the sub-population comparisons presented below examine the effect of visitors on the 1991 assessments of total bedroom need, derived as in Table 5.2. Using these results, revised 1986 estimates which take account of the effect of visitors are obtained, as in Table 5.3, assuming the same pattern and effect of visitors in both censuses. This revised estimate is considered to be a minimum estimate of indigenous housing need in 1986, giving a conservative view of intercensal change. The difference between the initial census estimates, with visitors included in 1986 and excluded in 1991, clearly overstates any improvement in housing conditions but provides an upper bound to any gains that might have been made.

Changes in overcrowding and housing need

The number of non-improvised indigenous dwellings and estimates of the total bedroom need (including that of residents of improvised dwellings and hostels for the homeless, night shelters and refuges) of the indigenous populations in major urban, other urban and rural areas are shown in Table 5.4. Note that comparisons do not take account of movements of areas between the section-of-State categories, such as, for example, the reclassification of Townsville from an urban centre in 1986 to the major urban category in 1991, and intercensal changes in the urban/rural classification in the Northern Territory (Taylor 1994).

Table 5.4. Total bedroom need by section-of-State, 1986 and 1991 Censuses.

	1991 Census			1986 Census		
	Non-	Total bedroom need		Non-	Total bedroom need	
Section-of-State	improvised dwellings	Visitors included	Visitors excluded	improvised dwellings	Visitors included	Visitors excluded
Major urban	23,943	5,747	4,118	18,295	5,998	4,298
Other urban	28,732	13,948	10,963	23,775	14,537	11,428
Rural	16,536	21,978	20,124	13,368	21959	20,107
Total	69,211	41,673	35,205	55,438	42,494	35,901

Sources: 1991 and 1986 Census of Population and Housing. The 1986 census estimate of total bedroom need, visitors excluded, is calculated using the 1991 proportional reduction in bedroom need.

The effect of visitors on overcrowding in indigenous dwellings in urban areas is immediately evident. This is consistent with evidence presented to

the parliamentary inquiry into the needs of urban dwelling indigenous people which indicated that many indigenous visitors to urban centres from rural and remote areas were unable to support themselves financially and were reliant on friends or relatives for accommodation, contributing to overcrowding (House of Representatives Standing Committee 1992). When visitors are excluded from the assessment, the lack of any significant reduction in total bedroom need at the national level is reflected in each section-of-State category, despite substantial increases in the number of indigenous dwellings in each case.

Table 5.5. Total bedroom need by tenure, 1986 and 1991 Censuses.

	1991 Census			1986 Census		
	Non-	Total bedroom need		Non-	Total bedroom need	
Tenure	improvised dwellings	Visitors included	Visitors excluded	improvised dwellings	Visitors included	Visitors excluded
Owned	8,073	2,296	1,870	5,694	2,786	2,269
Buying	10,950	1,658	1,222	8,810	2,068	1,524
Rented: gov't	20,556	9,442	6,796	17,944	13,517	9,729
other	25,064	18,403	15,964	19,201	14,981	12,996
Other	4,568	2,540	2,264	3,789	1,439	1,283
Improvised dwelling		6,552	6,306		7,091	6,825
Total	69,211	40,891	34,422	55,438	41,882	34,626

Sources: 1991 and 1986 Census of Population and Housing. The 1986 Census estimate of total bedroom need, visitors excluded is calculated using the 1991 proportional reduction in bedroom need. The estimates exclude the bedroom need allocated to adults in hostels for the homeless, night shelters and refuges, 783 and 610 persons in 1991 and 1986 respectively.

The comparisons of bedroom need by tenure category in Table 5.5 do, however, show substantial change, particularly in government and other types of rented housing. In 1986, government housing tenants accounted for 28 per cent of the total bedroom need of the indigenous population, with other rented housing accounting for 38 per cent. In 1991, the corresponding proportions were 20 and 46 per cent. These differences represent a reduction of 3,000 bedrooms, 30 per cent, in the total need of public housing tenants, while increased overcrowding in other rented housing is indicated by the addition of 3,000 bedrooms, 23 per cent, to the total need in this tenure. Bedroom need also increased by about 1,000 in the undefined other tenure category, a category which seems likely to include a substantial proportion of non-government rented housing. Home owners and purchasers reduced their bedroom need by about 20 per cent.

The confounding effects of visitors, population change and movement notwithstanding, direct comparisons of the population and

housing need between the 1986 Census, with visitors present, and the 1991 Census, excluding visitors, provide supporting evidence of a reduction in overcrowding in owned, purchased and rented public housing (Table 5.6). In each of these tenures, the increase in bedroom need associated with visitors in 1991 accounted for roughly half of the difference between the 1986 and 1991 Census estimates, a strong indication of a fall in the number of overcrowded multi-family and extended family households. In the very unlikely event that all visitors affecting overcrowding were members of secondary families, the bedroom need associated with family homelessness would be no higher than the 1986 level and family housing stress and other adult housing need would have been reduced. It seems more likely, however, that family homelessness in these tenures fell by at least 50 per cent, with lesser effects on, but still some reduction of, family housing stress and other adult housing need.

In contrast to these gains, the small difference in family homelessness and increases in family housing stress and related adults bedroom need in other rented housing, even with visitors included in the 1986 Census estimates, is evidence of a decline in the adequacy of indigenous housing in this sector. The number of elementary families increased by (at least) 29 per cent, compared to the average increase of 18 per cent and a rise of only 4 per cent in the public housing sector. Since the number of families identified in 1986 was inflated by the presence of visitors, these are minimum estimates, although visitors had similar effects on overcrowding in both rental categories.

It appears, then, that access to public housing for the indigenous population has been well below the level required to meet the needs of population growth and family formation, although attention has been given to reducing the overcrowding of those already housed. New families, however, appear to have been forced into other forms of tenure, in most cases other rental housing, shifting the burden of housing need from public rental to other types of rental accommodation. Since Aboriginal community-based housing represents about two-fifths of these dwellings, it seems inevitable that it has had to bear much of the burden associated with increased demand, and that the housing has, in consequence, been subject to a significant increase in overcrowding.

The comparisons between States and Territories indicate a lowering of overcrowding in New South Wales, South Australia and, most particularly, Western Australia, an increase in the Northern Territory, and no clearly discernible change in the other States (Table 5.7). More detailed comparisons of the population and housing need of indigenous households by State and Territory, although confounded by the differences associated with the treatment of visitors, are shown in Table 5.8. Variations between regional councils in estimates of total bedroom need are presented in Table 5.9.

Table 5.6. Indigenous population and housing need by tenure, 1986 Census (including visitors) and 1991 Census.[a]

Eligible population/ housing need	Family units/persons in the 1986 and 1991 censuses by housing tenure: Owned 1986	Owned 1991	Buying 1986	Buying 1991	Rented gov't 1986	Rented gov't 1991	Other rental 1986	Other rental 1991	Other 1986	Other 1991	Improvised 1986	Improvised 1991
Eligible population												
Elementary families	4,339	6,393	7,965	9,754	17,374	18,084	15,592	20,190	2,322	2,581	2,182	1,687
Boarders	643	370	503	388	2,218	1,170	2,306	1,879	329	231	260	226
Related adults	1,674	964	1,133	592	7,504	4,049	6,922	7,253	782	925	1,296	1,247
Group/other adults	311	387	279	375	503	705	2,565	3,149	401	360	429	419
Family homelessness and bedroom need												
Total families	467	186	293	84	2,118	565	2,347	1,873	197	305	2,182	1,,687
Total bedroom need	875	357	574	156	4,131	1,159	4,556	4,165	377	577	5,106	4414
Family housing stress and bedroom need												
Total families	646	618	656	578	2,675	2,089	3,102	3,687	346	551	n.a.	n.a.
Total bedroom need	1,001	908	875	687	4,032	2,766	4,723	5,770	535	864	n.a.	n.a.
Other adult housing need												
Boarders	346	147	256	161	1,685	790	1,668	1,253	176	159	260	226
Related adults	530	419	343	200	3,590	2,005	3,661	4,485	325	567	1,296	1,247
Group/other adults	34	45	20	18	79	76	373	291	26	97	429	419
Total bedroom need	910	611	619	379	5,354	2,871	57,02	6,029	527	823	1,985	1,892
Total bedroom need	2,786	1,870	2,068	1,222	13,517	6,796	14,981	15,964	1,439	2,264	7,091	6,306

a. The results in Table 2.11 and 2.12 include improvised dwellings in some cases. Those figures have therefore been adjusted where necessary to give separate results for the improvised dwellings component.

Sources: 1986 Census of Population and Housing and results in Tables 2.11 and 2.12.

Table 5.7. Total bedroom need by State/Territory, 1986 and 1991 Censuses.

State/ Territory	1991 Census Non-improvised dwellings	1991 Census Total bedroom need Visitors included	1991 Census Total bedroom need Visitors excluded	1986 Census Non-improvised dwellings	1986 Census Total bedroom need Visitors included	1986 Census Total bedroom need Visitors excluded
NSW and ACT	22,490	6,421	4,827	17,598	7,227	5,433
Victoria	5,850	1,166	866	4,312	1,146	851
Queensland	17,840	11,853	9,871	14,902	11,236	9,357
South Australia	4,374	2,234	1,860	3,663	2,329	1,939
Western Australia	9,148	7,521	6,166	7,331	9,097	7,458
Tasmania	3,309	379	265	2,516	397	278
Northern Territory	6,200	12,100	11,350	5,116	11,058	10,373
Total	69,211	41,674	35,205	55,438	42,490	35,894

Sources: 1986 and 1991 Censuses of Population and Housing. The 1986 Census estimate of total bedroom need, visitors excluded is calculated using the 1991 proportional reduction in bedroom need.

The indigenous population of New South Wales and the Australian Capital Territory combined increased by 19 per cent from 1986 to 1991, while the number of indigenous households increased by 28 per cent, about 5,000 additional dwellings. The net effect appeared to be a reduction of about 11 per cent, 600 bedrooms, in the total need. This difference could, however, readily be explained by differences in the numbers of visitors between the two censuses. In the 1991 Census, visitors in 1,936 indigenous households (9 per cent of the total) resulted in the addition of 1,600 bedrooms to the total need assessment.

The number of families in this region increased by (at least) 25 per cent, paralleling the rise in the number of indigenous dwellings (Table 5.8). Overcrowding in multi-family dwellings appears to have been reduced, the fall of 1,250 in bedroom need being higher than would be expected from visiting household members, with perhaps some reduction in the housing need of boarders and related adults sharing family dwellings.

Five of the six regional councils showed a reduction in total bedroom need, with no discernible change in Coffs Harbour (Table 5.9). This region experienced a higher than average increase of 40 per cent in the number of indigenous households, reflecting substantial population growth and a similar increase in the number of indigenous families. In other regions, the figures indicate reductions in total bedroom need of at least 9 per cent in Sydney, 12 per cent in Wagga Wagga and more than 20 per cent in Queanbeyan, Tamworth and Bourke, each case reflecting a lower level of overcrowded multi-family and extended family households.

Table 5.8. Indigenous population and housing need by State/Territory: 1986 Census (including visitors) and 1991 Census.

	Family units/persons in the 1986 and 1991 Censuses by State/Territory													
	NSW & ACT		VIC		QLD		SA		WA		TAS		NT	
	1986	1991	1986	1991	1986	1991	1986	1991	1986	1991	1986	1991	1986	1991
Eligible population														
Elementary families	14,095	17,601	3,133	4,276	13,003	15,206	3,161	3,564	7,753	8,150	2,044	2,739	6,585	7,153
Boarders	1,631	1,094	323	248	1,889	1,303	410	206	1,142	688	107	61	757	664
Related adults	4,649	2,885	852	520	5,331	4,316	1,293	852	3,571	2,604	243	130	3,372	3,723
Group/other adults	1,598	1,927	488	644	1,378	1,529	347	420	744	817	157	180	386	654
Family homelessness and bedroom need														
Total families	933	295	134	36	1,574	1,042	454	320	1,935	940	41	17	2,534	2,050
Total bedrooms	1,854	605	258	72	3,088	2,403	909	741	4,016	2,189	80	31	5,417	4,782
Family housing stress and bedroom need														
Total families	1,710	1,698	308	334	2,429	2,399	342	307	1,193	1,092	146	146	1,297	1,547
Total bedrooms	2,343	2,130	405	393	3,702	3,586	474	415	1,760	1,599	174	168	2,308	2,704
Other adult housing need														
Boarders	1,053	582	176	112	1,372	876	280	108	839	475	65	22	606	563
Related adults	1,612	1,090	224	166	2,633	2,558	563	467	2,141	1,621	53	24	2,519	2,996
Group/other adults	369	421	84	123	440	448	103	129	343	284	25	20	207	305
Total adults/bedrooms	3,034	2,093	484	401	4,446	3,882	946	704	3,323	2,378	142	66	3,332	3,864
Total bedroom need	7,228	4,827	1,147	866	11,236	9,871	2,329	1,860	9,099	6,166	396	265	11,057	11,350

Sources: 1986 Census of Population and Housing and results in Table 2.14.

Table 5.9. Total bedroom need by regional council, 1986 and 1991 Censuses.

Regional council	1991 Census Non-improvised dwellings	1991 Census Total bedroom need Visitors included	1991 Census Total bedroom need Visitors excluded	1986 Census Non-improvised dwellings	1986 Census Total bedroom need Visitors included	1986 Census Total bedroom need Visitors excluded
Sydney	8,215	1,625	1,215	6,488	1,787	1,336
Queanbeyan	1,850	394	268	1,459	498	339
Wagga Wagga	3,804	1,074	770	3,141	1,209	867
Coffs Harbour	4,927	1,480	1,145	3,486	1,399	1,082
Tamworth	2,234	999	747	1,789	1,228	918
Bourke	1,460	850	682	1,235	1,106	887
Wangaratta	2,978	546	408	2,170	458	342
Ballarat	2,872	620	458	2,142	688	508
Adelaide	3,042	618	424	2,444	846	580
Ceduna	305	348	294	271	354	299
Port Augusta	1,027	1,267	1,141	948	1,129	1,017
Hobart	3,309	379	265	2,516	397	278
Brisbane	5,455	1,365	998	4,422	1,445	1,056
Rockhampton	2,234	1,158	933	1,836	1,079	869
Roma	1,682	816	630	1,314	853	659
Townsville	2,694	2,065	1,736	330	1,793	1,507
Cairns	2,591	1,991	1,640	2,248	2,189	1,803
Mount Isa	1,251	1,317	1,144	1,190	1,370	1,190
Torres Strait	1,023	1,349	1,157	852	1,275	1,094
Cooktown	910	1,792	1,633	710	1,232	1,123
Perth	3,340	1,209	815	2,604	1,638	1,104
Narrogin	1,380	659	473	1,171	798	573
Geraldton	996	684	525	883	878	674
Kalgoorlie	535	396	314	444	565	448
South Hedland	892	848	694	699	888	727
Broome	605	597	505	449	580	491
Derby	600	1,077	946	471	999	877
Kununurra	560	1,021	930	440	1,455	1,325
Warburton	240	1,030	964	170	1,296	1,213
Darwin	1,764	1,017	776	1,650	794	606
Alice Springs	738	810	688	657	812	690
Katherine	947	1,987	1,857	802	1,431	1,337
Tennant Creek	473	1,011	976	306	885	854
Jabiru	906	2,661	2,545	702	2,011	1,923
Apatula	757	2,278	2,223	517	2,892	2,822
Nhulunbuy	605	2,334	284	482	2,233	2,185

Sources: 1991 and 1986 Censuses of Population and Housing. The 1986 Census estimate of total bedroom need, visitors excluded is calculated using the 1991 proportional reduction in bedroom need.

Figures for Victoria suggest increased overcrowding in the Wangaratta region with some reduction in Ballarat, although the changes are small. Nevertheless, 1991 Census results showed 18 homeless families in each region, while 1986 Census estimates (with visitors included) showed 51

homeless families in Wangaratta and 83 in Ballarat. Similar numbers of visitors in each region in 1991 suggest a reduction in family homelessness in Ballarat, perhaps in both regions. The number of indigenous dwellings in Victoria increased by 36 per cent, with corresponding increases in each region, while the indigenous population increased by 33 per cent, an increase which has been associated with a greater propensity to self-identify, especially in the major urban centres of New South Wales and Victoria (Evans, Kahles and Bate 1993).

The indigenous population of South Australia increased by 14 per cent from 1986 to 1991, while indigenous dwellings increased by 19 per cent, about 700 additional dwellings. The net effect on overcrowding appears as a small reduction of about 100 bedrooms, 4 per cent of the 1986 total bedroom need assessment. This slight reduction in bedroom need is the result of better housing conditions in the Adelaide region, no apparent change in Ceduna and an increase in overcrowding in the Port Augusta area. The indigenous population of Adelaide increased by 17 per cent and the number of indigenous dwellings by 24 per cent, with an estimated reduction in total bedroom need of 27 per cent. In Ceduna, a gain of 13 per cent in the number of indigenous dwellings had no effect on overcrowding. In contrast, the total bedroom need in Port Augusta increased by about 10 per cent, with an 8 per cent increase in indigenous dwellings. This analysis appears consistent with indigenous population change in the State, which shows high rates of growth in the metropolitan and rural areas and little change in the indigenous population of other urban centres, and a more active program of indigenous housing provision in Adelaide (Taylor 1994a).

In Queensland, there seems to have been no significant intercensal change in bedroom need in Brisbane, Rockhampton, Roma, Mount Isa and the Torres Strait regional council areas. Indigenous housing conditions in Townsville appear to have worsened, with an increase of about 200 in total bedroom need, while the neighbouring region of Cairns improved by a similar amount. Cooktown, however, experienced a very substantial decline in housing adequacy, the total bedroom need increasing by 45 per cent, from 1,123 to 1,633 bedrooms.

The indigenous populations of Townsville and Cairns are similar in size, Townsville being slightly larger, reflected in the similarity of the number of dwellings and total bedroom need estimates from the 1991 Census. In each case, the presence of visitors on census night has a significant effect on overcrowding, with visitors to about 300 indigenous dwellings in each region accounting for an increase in total need of 330-50 bedrooms. The 1986 Census comparisons, however, show a substantially higher level of housing need in Cairns than in Townsville, 2,189 and 1,793 bedrooms respectively. This difference is the result of a higher level of overcrowded multi-family and extended family households in Cairns, while primary family housing stress, which is least affected by visitors, is similar in both regions at both censuses. Cairns may have experienced an influx of

visitors at the time of the 1986 Census, perhaps due to some event being held in the region at that time. Otherwise, it appears that housing conditions in Cairns have improved substantially in the intercensal period, while those in Townsville have worsened.

The number of indigenous dwellings in the Cooktown region rose by 200 between 1986 and 1991, from 710 to 910, with a matching increase in elementary families. The number of homeless families in the region appeared unchanged, but their average bedroom need increased from 1.9 to 2.4 bedrooms per family. In addition, primary family bedroom need increased by (at least) 26 per cent, and the number of other adults in overcrowded family dwellings increased by (at least) 50 per cent. These outcomes appear consistent with larger family sizes from natural increase and increasing numbers of children reaching maturity, both factors adding to housing requirements.

The indigenous population of Western Australia increased by slightly less than 11 per cent from 1986 to 1991, while the number of indigenous households increased by 25 per cent, just over 1,800 dwellings. The net effect on overcrowding was a reduction in total need of about 1,300 bedrooms (17 per cent). In the 1991 Census, the presence of visitors in 1,140 indigenous households (12 per cent of the total) resulted in the addition of 1,350 bedrooms to the total need assessment. The census comparisons in Table 5.8 support a fall of roughly 500 in the number of homeless families, little change in primary family housing stress and some reduction in the numbers of boarders and family relatives in overcrowded dwellings.

Additions to the number of indigenous dwellings were below the State average in Geraldton (up 13 per cent), Narrogin (up 18 per cent) and Kalgoorlie (up 20 per cent) while Perth, South Hedland, Derby and Kununurra each grew by 28 per cent and the numbers of indigenous dwellings in Broome and Warburton rose by 35 and 41 per cent respectively (Table 5.9). In the light of these figures, the lack of any significant reduction in overcrowding in South Hedland, Broome and Derby appears surprising, particularly in comparison with the gains in other regions. The total bedroom need fell significantly in each of the four regions in the south and south-west of the State: by 26 per cent in Perth, 17 per cent in Narrogin, 22 per cent in Kalgoorlie and 30 per cent in Geraldton. Similarly, Kununurra and Warburton showed reductions of 30 and 21 per cent respectively.

Reduced overcrowding in Kununurra and Warburton is perhaps more the result of population loss to other regions than to significant improvements in housing conditions locally. The number of families declined from 675 (including some visitors) to 543 in Kununurra and from 532 to 385 in Warburton, with the number of homeless families falling from 310 to 142 and from 383 to 213 respectively. The focusing of the majority of Aboriginal housing provision in Perth and other urban centres has been suggested as one possible explanation for the apparent movement

of the indigenous population away from rural areas (Taylor 1994b). On the other hand, the lower than expected rate of population growth in Western Australia has been seen as evidence of a possible undercount in the 1991 Census relative to the 1986 Census, particularly in non-metropolitan areas (Gaminiratne 1993).

In the Northern Territory, the inclusion of household visitors to 560 dwellings in the 1991 Census analysis increased total bedroom need by about 1,000 bedrooms. Assuming similar visitor effects in 1986 indicates that overcrowding in the Territory increased, despite an increase of almost 1,100 (17 per cent) in the number of indigenous dwellings. An explanation for this increase in overcrowding which is consistent with population growth in the Territory of 15 per cent, the effect of visitors and the population and housing need comparisons in Table 5.8 is the following. Increased family housing stress and its associated bedroom need appear consistent with natural increase in families. Family homelessness in 1986 is undoubtedly overstated because of visitors, but a reduction of 200-300 in the number of homeless families seems likely. The average bedroom need of homeless families has however increased between the censuses, with the result that bedroom need in this category changed little. The majority of the intercensal change in bedroom need is then associated with the increased number of boarders and relatives sharing family housing.

There are, however, very substantial variations between regional councils in the Territory, both in the number of additional indigenous dwellings and in levels of overcrowding (Table 5.9). Apatula stands out as the only region to have reduced levels of overcrowding, although there are some concerns about errors in the census enumeration procedures in this region, particularly on outstations (Taylor 1993d). There appears to have been a very substantial reduction in family homelessness, from 787 families to 439 families (assuming that visitors had as little effect in 1986 as in 1991), a fall in the population of about 100 families, and the addition of 240 indigenous dwellings, an increase of 46 per cent. Nhulunbuy and Alice Springs also had fewer homeless families, but population growth appeared to outweigh these gains, total bedroom need rising by 5 per cent in Nhulunbuy and unchanged in Alice Springs.

The increased number of indigenous dwellings in Tennant Creek (up 55 per cent), Jabiru (up 29 per cent), Katherine (up 18 per cent) and Darwin (up 7 per cent) appear to have been insufficient to affect a reduction in family homelessness and overcrowding. The increase in bedroom need appears to reflect larger family and extended family households, the effect being stronger in Jabiru and Katherine because of higher proportions of improvised and multi-family dwellings.

In summary, the indigenous populations of New South Wales and Western Australia appear to have benefited most from provision of housing between 1986 and 1991, with reduced levels of overcrowding apparent in almost all regional council areas in those States. Ballarat in Victoria, Adelaide in South Australia, Cairns in Queensland and Apatula in the

Northern Territory are other regions which appear to have reduced overcrowding. A decline in housing conditions and increased levels of housing need are evident in Port Augusta in South Australia, Cooktown in Queensland, and in Darwin, Katherine, Jabiru and, less substantially, Tennant Creek in the Northern Territory. In all other regions, the level of housing need has apparently remained more or less unchanged.

Changes in after-housing poverty

For the analysis of after-housing poverty levels using 1991 Census data, the AHPL for a couple is taken to be $150 a week, with values of $90 a week for a single adult and $45 a week for a dependent child, and after-tax income is derived using the 1991 tax rates. The corresponding values of the AHPL in 1986 are $109 a week for a couple, $67 a week for a single adult and $33 a week for a dependent child, and 1986 tax rates are applied. With these modifications, the methodology used to determine households in after-housing poverty is identical to that used for the 1991 Census described in Chapter 3.

Since the inclusion of visitors as household members in the 1986 Census might affect the comparison, they have also been included in the 1991 Census assessment of after-housing poverty levels. Comparison of these revised estimates with those given previously in Chapter 3 indicates that their inclusion in fact has very little effect on the number of households with income before housing costs is below their AHPL, but there is some reduction in the number of households in poverty after housing costs. Different patterns and effects of visitors in 1986 to those in 1991 could affect the comparisons, but excluding visitors altogether would undoubtedly overstate any reduction, and understate any increase, in after-housing poverty levels. Increased self-identification and changes in census coverage might also effect comparisons.

Table 5.10 shows the number of non-improvised indigenous households in after-housing poverty in the two censuses for each section-of-State, tenure and State and Territory category. Improvised dwellings, and dwellings whose only indigenous residents are visitors (in 1991 only), students or dependent children are again excluded from the after-housing poverty analyses.

At the national level, the number of non-improvised indigenous dwellings increased by almost 14,000 between the 1986 and 1991 Censuses. This was accompanied by a small decrease in the number of households with net incomes below their AHPL, down 600 (11 per cent), but a larger increase in the number of households taken into poverty by housing costs, up by about 2,850 (27 per cent). The total number of households in after-housing poverty thus increased by about 2,250 (up 14 per cent). Expressed as proportions of the total number of indigenous dwellings identified in each census, these figures correspond to a reduction from 10 to 7 per cent in poverty before housing costs, the proportion of

households in poverty after housing costs remained steady at 19 per cent, and the total in after-housing poverty therefore declined by 2.6 per cent, from 29.3 to 26.7 per cent.

Table 5.10. Indigenous households (including visitors) in after-housing poverty by section-of-State, tenure and State/Territory, 1986 and 1991 Censuses.[a,b]

	Total dwellings		Income < AHPL		Income < AHPL plus housing costs		Total in after-housing poverty	
	1986	1991	1986	1991	1986	1991	1986	1991
Section-of-State								
Major urban	18,295	23,943	1,372	1,189	3,638	4,656	5,010	5,845
Other urban	23,775	28,732	2,440	2,052	4,815	5,976	7,255	8,028
Rural	13,368	16,536	1,850	1,820	2,140	2,828	3,990	4,648
Total	55,438	69,211	5,662	5,061	10,593	13,460	16,255	18,521
Tenure								
Owned	5,694	8,073	458	381	378	274	836	655
Buying	8,810	10,950	331	285	1,172	1,239	1,503	1,524
Rented: gov't	17,944	20,556	2,653	2,121	4,228	5,440	6,881	7,561
other	19,201	25,064	1,758	1,737	4,141	5,880	5,899	7,617
Other	3,789	4,568	467	505	685	672	1,152	1,177
Total	55,438	69,211	5,667	5,029	10,604	13,505	16,271	18,534
States/Territory								
NSW	17,184	21,869	1,669	1,487	3791	4,509	5,460	5,996
Victoria	4,312	5,850	322	336	811	1,148	1,133	1,484
Queensland	14,902	17,840	1,625	1,157	2,985	3,540	4,610	4,697
SA	3,663	4,374	395	314	607	885	1,002	1,199
WA	7,331	9,148	830	886	1,285	1,872	2,115	2,758
Tasmania	2,516	3,309	140	120	442	567	582	687
NT	5,116	6,200	645	723	666	888	1,311	1,611
ACT	414	621	16	22	49	79	65	101
Total	55,438	69,211	5,642	5,045	10,636	13,488	16,278	18,533

a. The estimates include dwellings with missing income or housing costs data, which are distributed proportionately across the appropriate income categories. Minor variations between tables result from estimation and rounding procedures.

b. Owned households in the poverty after housing costs category have after-tax income equal to their AHPL within the income categories allowed by the census data. Half of these households are assumed to be in poverty, but are included in the poverty after housing costs category to maintain consistency across tenures in the definition of poverty before housing costs.

Source: 1986 and 1991 Censuses of Population and Housing.

In metropolitan and other urban centres, the number of households in poverty before housing costs fell by about 15 per cent compared to a decline of only 2 per cent in rural areas. Households in poverty after housing costs increased by 28 per cent in major urban areas, 24 per cent in

smaller urban centres and 32 per cent in rural areas. When the increased number of indigenous dwellings is taken into account, however, there was a reduction of about 3 per cent in each category in the proportion of households in after-housing poverty.

The net increase in the number of households in after-housing poverty affects only tenants, particularly non-government housing tenants. In this category, households in after-housing poverty increased from 5,899 to 7,617, a rise of 29 per cent, while public housing tenants in after-housing poverty increased from 6,881 to 7,561, up 10 per cent, the latter being tempered by the net reduction, from 2,653 to 2,121 of households in poverty before housing costs. Expressed as a proportion of indigenous households in each tenure, after-housing poverty declined by just over 1 per cent to 36.8 per cent in public housing, and by less than half a per cent to 30.4 per cent in other rented housing. These results appear consistent with patterns identified in the previous section of a shift from public to non-public rental housing and an associated decline in indigenous housing conditions, evidenced by increased overcrowding and housing affordability problems.

Reductions in the proportion of indigenous households in after-housing poverty occurred in New South Wales, from 32 to 28 per cent, in Queensland, from 31 to 26 per cent, and in Tasmania, from 23 to 21 per cent. In Queensland, this resulted from a small increase of just 2 per cent in the number of households in after-housing poverty against the background of a 20 per cent increase in indigenous dwellings. The corresponding proportions in New South Wales were 10 and 28 per cent respectively and in Tasmania, 18 and 32 per cent. In the other States and Territories, larger percentage increases in the number of dwellings in after-housing poverty corresponded to the rise in the numbers of indigenous dwellings, with variations of less than 1 per cent in poverty rates.

Table 5.11 reports the changes between 1986 and 1991 at regional council level. In New South Wales, the Tamworth region had a higher than average increase in the number of households in poverty, but the poverty rate still fell very slightly, while Coffs Harbour and Wagga Wagga had lower than average increases, relative to the additional number of indigenous dwellings, resulting in falls of about 6 per cent in the proportion of indigenous households in poverty. After-housing poverty rates in the three other regions fell by about 3.5 per cent.

Both regions in Victoria had similar poverty rates in 1991, approximately 25 per cent, following a reduction since 1986 of about 2.5 per cent in the Ballarat region while Wangaratta remained unchanged. Port Augusta in South Australia showed an increase of about 2 per cent in the poverty rate, while Adelaide and Ceduna remained unchanged.

In Queensland, reductions in the proportion of households in after-housing poverty occurred in every regional council area except Cooktown. In the three southern regions, increased numbers of households in poverty were lower than expected relative to the rise in indigenous housing, while

Townsville, Cairns, Mount Isa and Torres Strait showed slight or, in the case of the latter two regions, quite substantial reductions in the number of households in poverty. The Cooktown region, however, has clearly not benefited from this trend, with an increase in the after-housing poverty rate from 23.7 to 31.5 per cent.

Table 5.11. Indigenous households (including visitors) in after-housing poverty by regional council, 1986 and 1991 Censuses.

Regional council	Non-improvised dwellings		Income < AHPL		Income < AHPL plus housing costs		Total in after-housing poverty	
	1986	1991	1986	1991	1986	1991	1986	1991
Sydney	6,488	8,215	451	426	1,278	1,469	1,729	1,895
Queanbeyan	1,459	1,850	110	86	283	336	393	422
Wagga Wagga	3,141	3,804	382	296	767	877	1,149	1,173
Coffs Harbour	3,486	4,927	333	324	898	1,097	1,231	1,421
Tamworth	1,789	2,234	240	210	352	521	592	732
Bourke	1,235	1,460	182	179	261	297	443	476
Wangaratta	2,170	2,978	149	161	379	582	528	743
Ballarat	2,142	2,872	174	175	431	566	605	741
Adelaide	2,444	3,042	234	175	431	635	665	810
Ceduna	271	305	47	34	36	58	83	92
Port Augusta	948	1,027	118	109	137	189	255	298
Hobart	2,516	3,309	140	120	444	567	584	687
Brisbane	4,422	5,455	376	208	989	1,227	1,365	1,435
Rockhampton	1,836	2,234	168	151	348	407	516	558
Roma	1,314	1,682	160	145	265	340	425	485
Townsville	2,330	2,694	241	172	481	509	722	681
Cairns	2,248	2,591	283	197	521	594	804	791
Mount Isa	1,190	1,251	136	79	174	172	310	251
Torres Strait	852	1,023	199	60	87	146	286	206
Cooktown	710	910	92	162	76	125	168	287
Perth	2,604	3,340	259	242	518	739	777	981
Narrogin	1,171	1,380	176	135	247	335	423	470
Geraldton	883	996	99	84	163	200	262	284
Kalgoorlie	444	535	51	50	74	94	125	144
South Hedland	699	892	53	74	106	147	159	221
Broome	449	605	36	74	52	139	88	213
Derby	471	600	55	72	47	100	113	172
Kununurra	440	560	70	105	53	70	123	175
Warburton	170	240	21	59	13	39	34	98
Darwin	1,650	1,764	122	79	251	237	373	316
Alice Springs	657	738	43	54	107	100	150	154
Katherine	802	947	134	142	97	156	231	298
Tennant Creek	306	473	31	87	35	74	66	161
Jabiru	702	906	114	165	80	141	194	306
Apatula	517	767	78	138	52	92	130	230
Nhulunbuy	482	605	143	55	40	90	183	145

Sources: 1986 and 1991 Census of Population and Housing.

The four regions in the south and south-west of Western Australia each showed slight reductions in poverty rates, while the central and northern regions all showed increased levels of after-housing poverty. In Broome and Warburton, in particular, the number of households in after-housing poverty more than doubled, increasing their poverty rates from 20 per cent in 1986 to 36 and 41 per cent respectively in 1991. It seems, in fact, that there is almost a one-to-one correspondence between additional indigenous households and additional households in after-housing poverty in these two regions.

In the Northern Territory, after-housing poverty rates fell in the Darwin and Alice Springs regional council areas, by 4.7 and 1.9 per cent respectively, and more substantially in Nhulunbuy, down from 40 to 24 per cent. Apatula, which appeared to have rehoused substantial numbers of families who were living in shared and improvised dwellings, had a 5 per cent increase in poverty rates, broadly similar to the rise in Katherine (up 3 per cent), Tennant Creek (up 9 per cent) and Jabiru (up 6 per cent).

This comparison of overcrowding and after-housing poverty suggests that there has been relatively little change overall in the housing conditions of the indigenous population between the 1986 and 1991 Censuses. The relatively low level of access to public housing during this period may be of some cause for concern, although it may reflect a shift in indigenous housing preferences, and there is some compensation in the reduction of overcrowding evident in this sector. Regional councils throughout New South Wales and in the southern part of Western Australia show reduced levels of overcrowding and after-housing poverty, and lower poverty levels are evident in all Queensland regions except Cooktown. Conditions among the most remote indigenous populations in regions such as Cooktown, Port Augusta, the northern part of Western Australia and most of the Northern Territory appear to have worsened however, with increased overcrowding and higher after-housing poverty levels.

6. Comparisons between the 1991 Census and the 1992 ATSIC Housing and Community Infrastructure Needs Survey

A major initiative of the NAHS was the conduct of a national Housing and Community Infrastructure Needs Survey in April-May 1992 to collect information on the housing need and, more particularly, the infrastructure needs of urban, rural and remote Aboriginal and Torres Strait Islander communities with indigenous populations of 1,000 or less persons. This survey represents Stage 1 of the ATSIC Housing and Community Infrastructure Needs Assessment Project.

The survey sought information on access to health and education services, periodic changes in the community's population, the water supply and sewerage arrangements, electricity supply, road and air access, and telephone, postal and radio services available to the community. In addition, the survey sought information on the size of household units in the community, their housing need and the condition of the current housing stock. Only these latter data on housing need are used in this analysis.

The data were collected through consultations with reference groups formed at each locality. The use of reference groups was considered essential, particularly in larger communities, to reconcile any differences in individual perceptions or knowledge and obtain more reliable information about housing need and housing conditions. For each residential dwelling in the community, the survey sought information on the type of dwelling, the number of bedrooms, the number of resident adults and children, and the extra housing need of people in that dwelling. Where the reference group indicated that extra housing was needed, the composition of each family unit in housing need was recorded. The term family unit could refer to a lone person, a group, a family or an extended family, with family composition recorded only in terms of the number of male adults, female adults, children under 15 years of age, and male and female persons aged 15-19 years.

There are a number of aspects of these data which make strict comparisons between the survey and the census impossible. First, the coverage of the survey is not clearly defined geographically, and it is therefore not possible to identify an indigenous population from the census which matches exactly that covered by the survey. Second, the information collected in the survey on persons in a dwelling was limited simply to the number of adults and the number of children. No information was sought about their relationships and it is therefore impossible to determine household composition in terms of family structures. Third, whereas the census analysis consistently applies a set of rules to determine housing need, the reference groups need not. Reference groups could have indicated that extra housing was needed on grounds other than overcrowding (for

example, based on the poor condition of the dwelling), or that no extra housing was required even though the dwelling was overcrowded.

The aim of the analyses reported here is not, therefore, to show that the census and the survey give directly comparable estimates. The survey provides, subject to certain constraints, a subjective assessment of the additional housing need of the indigenous communities surveyed, while the census analyses provide an assessment based on objective criteria which can be applied more generally to both urban and rural populations, and to indigenous and non-indigenous households.

Although the estimates of housing need obtained from the survey and census analyses should not be expected to give the same 'answer', in the sense of showing the same level of housing need in a particular region for example, the patterns should be broadly similar. Those areas where reference groups indicate a high level of housing need should have correspondingly high levels of overcrowding and housing need identified in the census analysis. The two approaches should be consistent, in most cases, in their assessment of the housing need of one region relative to another, although the estimates of housing requirements differ because of the different approaches taken.

While the indigenous population coverage of the survey cannot be precisely matched with census data, it is useful to compare the actual coverage, in terms of the number of dwellings and persons identified, with the corresponding census estimates for those regions that were expected to be included. If the survey failed to identify a significant proportion of the indigenous population in those areas, then it may also have failed to identify a significant proportion of the indigenous housing need it was meant to identify.

The results in the following section therefore examine the coverage of the indigenous population by the survey in comparison to the population identified by the census. The estimates of housing need derived from the survey and those derived from the census are then compared, with the aim of determining whether the census-based approach to indigenous housing need assessment provides an effective alternative to the costly effort of conducting a very complex national survey.

The coverage of the 1992 ATSIC Housing and Community Infrastructure Needs Survey

The 1992 Housing and Community Infrastructure Survey involved consultations with reference groups from 1,353 indigenous communities throughout Australia, excluding the major urban centres and some smaller urban centres expected to have indigenous populations of over 1,000 persons. The excluded urban centres, and the associated regional council are listed in Table 6.1

In the cases of Sydney, Brisbane, Perth and Hobart, the whole regional council was excluded. With the exceptions of Melbourne, Adelaide, Darwin, Shepparton and Port Augusta, all other excluded urban centres are located in New South Wales or Queensland. It should be noted that the list for New South Wales is not considered to be comprehensive, and that a number of urban centres which were included in the initial listing were excluded due to population density. The regional council most affected by these exclusions was Coffs Harbour, and the survey coverage in that region is therefore understated to some degree.

Table 6.1. Urban centres excluded from the ATSIC Housing and Community Infrastructure Needs Survey, 1992.

Urban centre	1991 Census definition used[a]	Regional council
Sydney	Sydney Regional Council	Sydney
Canberra	Australian Capital Territory except Jervis Bay	Queanbeyan
Queanbeyan	Queanbeyan SLA	Queanbeyan
Wollongong	Wollongong SSD	Sydney/Queanbeyan
Wagga Wagga	Wagga Wagga SLA	Wagga Wagga
Newcastle	Newcastle LGA	Coffs Harbour
Armidale	Armidale SLA	Tamworth
Tamworth	Tamworth SLA	Tamworth
Moree	Moree urban centre	Tamworth
Melbourne	Melbourne SD except Healesville urban centre	Wangaratta/Ballarat
Shepparton	Shepparton (C) and Shepparton (S) - Pt A SLAs	Wangaratta
Brisbane	Brisbane Regional Council	Brisbane
Rockhampton	Rockhampton SSD	Rockhampton
Mackay	Mackay SD except Sarina SLA	Rockhampton
Toowoomba	Toowoomba SLA	Roma
Townsville	Townsville SSD except Palm Islands SLA	Townsville
Cairns	Cairns SLA	Cairns
Innisfail	Innisfail urban centre	Cairns
Mount Isa	Mount Isa urban centre	Mount Isa
Adelaide	Adelaide and Outer Adelaide SDs	Adelaide
Port Augusta	Port Augusta SLA	Port Augusta
Perth	Perth Regional Council	Perth
Darwin	Darwin SD	Darwin

a. SLA Statistical Local Area; LGA Local Government Area; SD Statistical Division; SSD Statistical Sub-division.

In addition to the exclusion of these urban centres, any Statistical Local Areas (SLAs) where no consultations were conducted have been identified. Table 6.2 provides a breakdown from the 1991 Census of the indigenous population in the 32 regional councils covered by the survey, indicating the number of indigenous dwellings and persons in the areas covered by SLAs where consultations were held, SLAs where no consultations were conducted and the excluded urban centres.

Table 6.2. 1991 Census counts of indigenous dwellings and persons by regional council and survey coverage.

Regional council	SLAs where consultations were held		SLAs where no consultations were held		Excluded urban centres	
	Dwellings	Persons	Dwellings	Persons	Dwellings	Persons
Queanbeyan	1,047	3,850	47	137	756	2,437
Wagga Wagga	3,354	12,253	157	542	293	1,036
Coffs Harbour	4,465	16,376	22	72	440	1,349
Tamworth	1,229	4,931	65	219	940	3,744
Bourke	1,460	6,119	0	0	0	0
NSW total	1,155	43,529	291	970	2,429	8,566
Wangaratta	405	1,439	654	2,203	1,919	6,104
Ballarat	957	3,383	606	1,963	1,309	4,132
Victoria total	1,362	4,822	1,260	4,166	3,228	10,236
Rockhampton	1,401	5,593	207	770	626	2,547
Roma	1,002	4,181	328	1,228	352	1,258
Townsville	1,001	4,577	76	286	1,617	63,54
Cairns	1,580	7,007	0	0	1,011	3,860
Mount Isa	623	3,199	0	0	628	2,765
Torres Strait	1,023	5,219	0	0	0	0
Cooktown	910	5,376	0	0	0	0
Queensland total	7,540	35,152	611	2,284	4,234	16,784
Adelaide	422	1,545	216	723	2,404	7,592
Ceduna	270	1,196	33	98	0	0
Port Augusta	660	3,237	0	0	367	1,301
SA total	1,352	5,978	249	821	2,771	8,893
Narrogin	1,262	5,319	118	448	0	0
Geraldton	871	3,758	125	532	0	0
Kalgoorlie	535	2,355	0	0	0	0
South Hedland	891	3,,792	0	0	0	0
Broome	605	2,867	0	0	0	0
Derby	600	3,308	0	0	0	0
Kununurra	560	3,273	0	0	0	0
Warburton	240	1431	0	0	0	0
WA total	5,564	26,103	243	980	0	0
Darwin	237	928	0	0	1,527	5,757
Alice Springs	738	3,364	0	0	0	0
Katherine	947	5,447	0	0	0	0
Tennant Creek	473	2,656	0	0	0	0
Jabiru	905	6,160	0	0	0	0
Apatula	767	5,166	0	0	0	0
Nhulunbuy	605	4,961	0	0	0	0
NT total	4,672	28,682	0	0	1,527	5,757

At the national level, the indigenous population in the SLAs where no consultations were conducted is not substantial, total numbers of 2,654 indigenous dwellings and 9,221 persons representing 7.6 and 6.0 per cent respectively of the in-scope survey population. In Victoria, however, where most of the 24 consultations were held in urban centres across the State, the

housing need of almost half of the State's indigenous population may have been ignored. Of 2,622 indigenous dwellings and 8,988 persons identified by the census in areas outside Melbourne and Shepparton, just less than half were in SLAs where no consultations were held. In other regions, however, the survey coverage as defined here appears to have been almost comprehensive.

Table 6.3. Survey counts of indigenous dwellings and persons in SLAs surveyed, 1992.

Regional council	Centres surveyed	Survey counts Dwellings	Persons	Per cent of census counts Dwellings	Persons
Queanbeyan	21	304	1,400	29	36
Wagga Wagga	79	1,905	8,371	57	68
Coffs Harbour	111	2,062	9,277	46	57
Tamworth	26	595	3,430	48	70
Bourke	43	867	4,486	59	73
NSW total	280	5,733	26,964	50	62
Wangaratta	11	415	1,772	102	123
Ballarat	13	665	3,012	69	89
Victoria total	24	1,080	4,784	79	99
Rockhampton	34	1,102	4,801	79	86
Roma	22	664	3,497	66	84
Townsville	12	858	4,484	86	98
Cairns	25	576	3,327	36	47
Mount Isa	39	633	3,829	102	120
Torres Strait	22	865	5,068	85	97
Cooktown	17	936	5,043	103	94
Queensland total	171	5,634	30,049	75	85
Adelaide	14	219	909	52	59
Ceduna	4	253	1,123	94	94
Port Augusta	89	472	2,787	72	86
SA total	107	944	4,819	70	81
Narrogin	54	867	4,258	69	80
Geraldton	25	625	3,177	72	85
Kalgoorlie/Warburton	34	662	3,825	85	101
South Hedland	24	552	2,745	62	72
Broome	20	528	2,617	87	91
Derby	46	707	3,524	118	107
Kununurra	64	536	3,402	96	104
WA total	267	4,477	23,548	80	90
Darwin	18	175	826	74	89
Jabiru	103	1,076	7,375	119	120
Alice Springs/Apatula	165	1,421	7,559	94	89
Katherine	81	1,027	5,538	108	102
Tennant Creek	39	470	2,225	99	84
Nhulunbuy	86	699	6,265	116	126
NT total	492	4,868	29,788	104	104

Sources: 1992 Housing and Community Infrastructure Survey and Table 6.2.

Table 6.3 provides a summary of the indigenous dwellings and persons identified in the survey. For each regional council covered by the survey, the number of centres or localities surveyed, and the numbers of indigenous dwellings and persons reported as living in them are given. The dwelling and population counts are also shown as a proportion of the dwellings and persons counts from the census in SLAs where consultations were held, reported in Table 6.2. Note that these comparisons exclude improvised dwellings identified in the census and shelters identified in the survey (see Table 6.4).

In New South Wales, coverage of the indigenous population by the survey was well below the level expected on the basis of census counts. The Queanbeyan region had the lowest coverage, the number of indigenous dwellings identified by the survey being only 29 per cent of the number given by the census. In the five other regions of New South Wales, the survey appears to have identified about half the number of indigenous dwellings recorded in the census, the proportion being highest in Bourke where consultations in 43 centres covered 60 per cent of indigenous dwellings identified by the census.

The higher proportion of indigenous persons than indigenous dwellings in each region suggests that the reported occupancy of dwellings identified in the survey is generally higher than that of the indigenous population recorded in the census. It could then be expected that overcrowding in the communities surveyed would be higher than the average levels identified by the census analysis. Both the lower population coverage of the survey and the difference in occupancy ratios make comparisons between the survey and census estimates of housing need in these regions difficult.

In Victoria, restriction of areas included in the census analysis to urban centres where reference consultations were held appears to provide a close match between survey and census populations in the Wangaratta region, but is less satisfactory in the Ballarat region. This region includes the larger towns in Victoria such as Geelong, Ballarat and Bendigo, and it seems likely that the lower coverage of the population by the survey is due to the wider distribution of indigenous families in these areas. This is precisely the problem foreseen by Taylor in his assessment of the options for the Stage 2 survey covering larger urban centres: 'It is doubtful that reference groups could be established in all major urban and metropolitan centres in a manner that fully represents the target population' (Taylor 1992: 13). In both regions, however, the occupancy ratios of dwellings reported in the survey are 20-30 per cent higher than expected from the census.

In Queensland regions, the survey counts for Cairns appear to have been much lower than for other council areas, with just over one-third of indigenous dwellings in this region identified. In other regions, coverage, relative to the census, ranges from two-thirds of indigenous dwellings in Roma to what appears to be total coverage of the Mount Isa and Cooktown

regions. Here again, with the exception of Cooktown, the number of persons per dwelling reported in the survey appears higher than the occupancy rates recorded in the census.

In South Australia, the centres surveyed in the Adelaide region, after excluding Adelaide and Outer Adelaide Statistical Divisions and SLAs where no localities were surveyed, covered about half of the indigenous dwellings recorded by the census. Ceduna and Port Augusta regions received better coverage, the latter requiring visits to 89 centres to identify just 472 dwellings.

The survey undertaken in Western Australia was very extensive, covering 267 centres, 80 per cent of the dwellings and 90 per cent of the population identified by the census. The Kalgoorlie and Warburton regions have been combined here since it appears there may have been some errors in identifying in which of these regions some centres were located. The census identified 240 non-improvised indigenous dwellings in Warburton and 535 in Kalgoorlie, while the survey figures gave 342 and 320 dwellings respectively.

The survey also identified a higher number of indigenous dwellings in the Derby region than did the census, although the counts of the indigenous population are in better agreement than the dwelling counts. One possible explanation for this difference is that dwellings which were vacant on census night are not included in the census counts reported here, since it is impossible to identify from the census whether a vacant dwelling is indigenous or not. In the case of Derby, however, this explanation would require about 100 dwellings, one-seventh of the indigenous households identified in the survey, to have been vacant at the time of the census. Other possible explanations are that some centres included in the survey have been identified in the wrong region, undercount in the census, overcount in the survey, or an increase in indigenous housing in the time between the two collections.

The survey of the Northern Territory, involving reference groups in 492 centres, appears to have been as comprehensive as the census overall, although there are some variations between regions in the comparability of the estimates. Alice Springs and Apatula are combined here, again to overcome what appear to be discrepancies between the survey and the census in the allocation of centres to regional council areas. The census identifies 738 indigenous dwellings in Alice Springs and 767 in Apatula, while the survey estimates give 248 and 1,173 dwellings respectively. Similar variations may account for differences in other regions, particularly Darwin and Jabiru.

Given concerns about possible census undercount of the indigenous population in the Northern Territory, and in other remote areas, the general agreement between two very different collection methods in both dwelling and population counts is notable. Some additional effort to ensure that the survey centres are correctly located within the regional boundaries defined by the census appears necessary and very worthwhile, the two collections

together providing a more comprehensive picture of the lives of indigenous people in the Territory than either collection alone.

Table 6.4. Census counts of improvised dwellings and survey counts of shelters.

Regional council	Centres surveyed	Survey counts of shelters Dwellings	Survey counts of shelters Persons	Census counts of improvised dwellings Dwellings	Census counts of improvised dwellings Persons
Queanbeyan	21	13	36	3	7
Wagga Wagga	79	96	237	9	16
Coffs Harbour	111	160	454	24	60
Tamworth	26	25	53	8	26
Bourke	43	54	208	11	34
NSW total	280	348	988	55	143
Wangaratta	11	46	86	a	a
Ballarat	13	43	198	a	a
Victoria total	24	89	284	4	10
Rockhampton	34	3	22	8	26
Roma	22	30	119	9	41
Townsville	12	91	279	100	503
Cairns	25	78	175	63	295
Mount Isa	39	150	814	37	211
Torres Strait	22	38	104	40	181
Cooktown	17	64	93	37	235
Queensland total	171	454	1,606	294	1,492
Adelaide	14	0	0	0	0
Ceduna	4	0	0	27	242
Port Augusta	89	150	632	157	596
SA total	107	150	632	184	838
Narrogin	54	2	9	a	a
Geraldton	25	57	161	15	66
Kalgoorlie/Warburton	34	77	503	171	1,039
South Hedland	24	8	48	56	263
Broome	20	29	125	27	149
Derby	46	119	615	59	267
Kununurra	64	114	944	57	334
WA total	267	406	2,405	385	2,118
Darwin	18	31	180	47	199
Jabiru	103	151	848	144	982
Alice Springs/Apatula	165	279	1,119	192	1,062
Katherine	81	157	752	110	603
Tennant Creek	39	59	267	68	402
Nhulunbuy	86	152	652	114	982
NT total	492	829	3,818	675	4,230

a. Confidential.

Sources: 1992 Housing and Community Infrastructure Survey and 1991 Census.

To complete the comparison of the survey and census data, Table 6.4 shows the number of shelters reported in the survey and the number of improvised dwellings identified in the census. Shelters were defined in the survey as 'any dwelling which has not been constructed by a qualified builder', examples being tents, cars, caravans and shacks. This is a wider definition than that used for improvised dwellings, particularly since it includes caravans. A higher number of shelters in the survey than improvised dwellings in the census could therefore be explained by indigenous households living in caravans.

These figures are separated from the other dwelling figures because in both the census and the survey, all people identified in improvised dwellings and shelters respectively are included in the assessed housing need. In a case such as Mount Isa, there appears to be reasonable agreement between the survey and census counts (Table 6.3), the inclusion of people in shelters would add an additional 150 dwellings and 814 persons to the survey housing need assessment. In the census analysis however, only those 211 people living in 37 improvised dwellings would be counted with certainty as being in housing need.

Despite the definitional differences between the survey and the census, the survey would be expected to identify the population living in improvised dwellings, at least in those areas where coverage was high. There are some cases where this does not appear to be the case. In Ceduna, the reference groups contacted appear to have ignored a small number of improvised dwellings, 27, which, according to the census, represent housing for a very substantial community of 242 people. Similarly, the census identifies over 1,000 people living in 171 improvised dwellings in the Kalgoorlie and Warburton regions, while the survey shows only 77 shelters with 500 residents. Other examples of this type occur throughout the regions in the north of Australia. Seasonal differences between the survey and the census perhaps explain these variations.

These results indicate some of the difficulties in comparing the estimates of housing need from the survey with those derived from the census. Not the least of these concerns is the apparent mislocation of some centres surveyed into the wrong regional council area. In New South Wales in particular, but also in some other regions such as Ballarat, Cairns, Roma and Adelaide, the match between survey and census populations is poor, raising legitimate concerns about their comparability. To some extent however, these differences reflect the difficulties associated with a survey approach to assessing the housing need of the indigenous population, giving support to the use of census data.

A further difficulty is the higher occupancy of indigenous dwellings reported in the survey relative to that reported in the census. This may perhaps be explained by reference groups taking absent family members into account in their estimate of the number of people living in a dwelling, including family members who returned as regular visitors even though they are usually resident elsewhere. While the census counts include people

who are temporarily absent, these people are perhaps more likely to be excluded than those present in the dwelling on census night, particularly if they have been absent for some time.

On the other hand, the focus of the survey on identifying discrete indigenous communities, outstations and town camps seems likely to have identified the worst housing conditions of the indigenous population. In regions where the census and the survey populations are poorly matched, this would lead to a higher estimate of housing need from the survey than from the census. It is nevertheless the case that even in regions such as Wangaratta and Mount Isa, where the survey and census estimates of the number of indigenous dwellings are almost identical, the number of people identified as residents of these dwellings is 20 per cent higher in the survey than in the census.

The comparison also raises some concerns about the treatment of improvised dwellings in the census analysis. If the timing of the census coincides with a period when indigenous families in remote areas are more likely to leave their homes temporarily and live in improvised dwellings, the census analysis will overstate housing need, perhaps significantly. Some account should perhaps be taken of the census count of unoccupied private dwellings in these areas, a factor that was not included in this assessment.

Estimates of housing need from the 1992 ATSIC Housing and Community Infrastructure Needs Survey and the 1991 Census

In the analysis of overcrowding in indigenous households reported in Chapter 2, household composition, defined in terms of the number of families, family composition and non-family members living in a dwelling, was the principal means of determining housing need. In particular, the housing need of an elementary primary family, narrowly defined as a single parent with children, a couple with or without children, or a family of related adults, was assessed only in terms of additional bedroom need in their current dwelling. Extra housing need was limited to the needs of overcrowded secondary families in family dwellings, adult boarders, relatives or group members contributing to overcrowding in their current dwelling, and residents of improvised dwellings.

Under the rules applied in the survey, reference groups were asked whether extra housing was needed for the people in each dwelling and, if so, how many 'families' needed housing. Dwellings should not have been vacated by allocating extra housing to all of the residents. Thus a family or group who wanted to live together may not be recorded as in need of extra housing, even though their current dwelling may be overcrowded and inadequate for their household size. The composition of a 'family' in need of extra housing was recorded in terms of the number of adults, youths and children, and could be one person, a group, a family or an extended family (defined as any group with 3 or more adults).

The comparison of housing need identified from the survey and the census is therefore limited to a comparison of the number of dwellings where extra housing is needed, and comparison of the number of people in need of extra housing. In the census analysis, this corresponds to the procedure used to identify family homelessness and other adult housing need in earlier analyses. Households with secondary families or other adult household members contributed to overcrowding are identified as being in extra housing need, and the number of people that need to be rehoused to relieve overcrowding are counted.

Family housing stress, the additional bedroom need of primary elementary families in inadequate housing identified in the census analysis, is excluded from this comparison on the assumption that these families would not be divided and would not therefore be identified as requiring extra housing in the survey. Analyses of the survey data show that many dwellings remained overcrowded after those allocated extra housing had been removed from the total number of residents in the dwelling. For example, in three bedroom dwellings, 60 per cent of the dwellings surveyed, an estimated 17 per cent appeared to be overcrowded after extra housing had been allocated. Overall, roughly one-fifth of the survey dwellings appeared to remain overcrowded. On the other hand, one-tenth of survey dwellings were vacated completely by the allocation of extra housing, and there appeared to be some overspecification of housing need in some cases when families were said to need extra housing, leaving a single adult in a two or three bedroom house.

Survey and census estimates of the number of households and persons with extra housing need in each regional council area and the ratio of the survey and census estimates are shown in Table 6.5. On the assumption that the survey population was, in areas where the coverage was incomplete, typical of the census population, it would be expected that the ratio of extra housing need suggested by the survey relative to that suggested by the census would be similar to the population ratio shown in Table 6.3. Comparison of those proportions shows, however, that this is clearly not the case, the estimates of housing need from the survey being substantially higher than those estimated from the census analysis.

In New South Wales, for example, the number of indigenous dwellings identified in the surveyed SLAs was half that recorded in the census. The survey count of households with extra housing need is, however, 37 per cent higher than that estimated from the census. Put another way, the reference group consultations are 2.75 times (137 per cent divided by 50 per cent) more likely than the census analysis to indicate that indigenous households in the SLAs surveyed have extra housing need. The difference between the two approaches is even greater in their identification of the number of persons in housing need. The survey counts in this case are about 4.5 times the level expected on the basis of census figures.

Table 6.5. Survey and census counts of indigenous households and persons with extra housing need.

Regional council	Survey count		Census count		Per cent of census count	
	Households	Persons	Households	Persons	Households	Persons
Queanbeyan	70	211	94	145	74	146
Wagga Wagga	512	1,544	271	404	189	382
Coffs Harbour	547	1,684	458	703	119	240
Tamworth	251	952	154	306	163	311
Bourke	280	1,168	239	426	117	274
NSW total	1,660	5,559	1,216	1,984	137	280
Wangaratta	83	320	37	58	224	552
Ballarat	167	595	78	111	214	536
Victoria total	250	915	115	169	217	541
Rockhampton	279	924	192	382	145	242
Roma	246	826	157	299	157	276
Townsville	311	1,328	200	555	156	239
Cairns	275	1,172	323	731	85	160
Mount Isa	195	937	204	496	96	189
Torres Strait	254	1,063	285	705	89	151
Cooktown	379	1,569	392	1,231	97	127
Queensland total	1,939	7,819	1,753	4,399	111	178
Adelaide	92	266	35	48	263	554
Ceduna	74	215	52	84	142	256
Port Augusta	200	986	173	558	116	177
SA total	366	1,467	260	690	141	213
Narrogin	162	601	200	307	81	196
Geraldton	174	671	174	357	100	188
Kalgoorlie/Warburton	278	1,126	161	468	173	241
South Hedland	159	573	166	435	96	132
Broome	107	338	136	345	79	98
Derby	249	1,053	205	659	121	160
Kununurra	230	1,275	158	509	146	250
WA total	1,359	5,637	1,200	3,080	113	183
Darwin	55	271	36	83	153	327
Jabiru	441	2,390	427	1,743	103	137
Alice Springs/Apatula	395	2,279	549	1,829	72	125
Katherine	242	1,244	337	1,122	72	111
Tennant Creek	113	609	169	609	67	100
Nhulunbuy	403	2,675	310	1,405	130	190
NT total	1,649	9,468	1,828	6,791	90	139

Sources: 1992 Housing and Community Infrastructure Survey and 1991 Census.

A pattern of higher housing need from the survey than estimated from the census analysis is evident across most regions. There are some regions, however, where the survey and census estimates are in better

agreement, at least in their assessment of the number of households with extra housing need. In Mount Isa, Torres Strait and Cooktown regions these estimates are essentially in agreement, although the survey estimates of persons in need of extra housing are somewhat higher than those from the census. Notably, the survey coverage of indigenous dwellings in these areas was comprehensive in Mount Isa and Cooktown, and 85 per cent of the census count in Torres Strait (Table 6.3). The survey estimates for the Townsville region, with a similar population coverage to that of Torres Strait, are however substantially higher than the census estimates.

In Western Australia, estimates of households with extra housing need are higher from the survey than from the census by a factor of 1.4, but the survey figures for Broome are in fact lower than the census count, even after taking account of the difference in coverage, and the persons with extra housing need correspond in this case.

In the Northern Territory, where the total coverage of indigenous dwellings by the survey and census were similar, the reference groups were less likely to indicate that extra housing was needed than the census analysis. There are some clear differences between the regions in the comparisons between the two approaches, although these are perhaps in part the effect of the problems associated with allocating survey centres correctly to regions. In Alice Springs/Apatula, Katherine and Tennant Creek, where the survey and census counts of dwellings are most similar, the number of households in need of extra housing according to the reference groups is around 70 per cent of the number identified through the census analysis. The number of persons reported as needing extra housing in the survey is, however, again higher than that from the census analysis.

An alternative view of this comparison between the survey and the census is to compare the proportion of households and persons with extra housing need estimated from the two approaches. These proportions are obtained simply by dividing the counts in Table 6.5 by the total survey and census counts given in Table 6.3 and Table 6.2 respectively. The results are shown, as percentages, in Table 6.6. Since the survey estimates use only survey data, and the census estimates use only census data, these are independent assessments of relative housing need. To the extent that the populations covered can be said to be comparable, the differences between these estimates are a direct indication of the difference in outcomes from the survey and census approaches.

Comparisons between State totals show the broad pattern of differences between the two approaches. In New South Wales and Victoria, the indigenous households surveyed are almost four times more likely to need extra housing than the census approach indicates. In South Australia, the survey estimate is twice that of the census; one-and-a-half times higher in Queensland and Western Australia; and one-seventh lower in the Northern Territory. This general pattern is repeated in the comparisons of the extra housing need of persons, with larger differences in each of the States but a smaller effect in the Northern Territory.

Table 6.6. Dwellings and persons with extra housing need as proportions of the survey and census counts.

Regional council	Per cent with extra housing need			
	Dwellings		Persons	
	Survey	Census	Survey	Census
Queanbeyan	23	9	15	4
Wagga Wagga	27	8	18	3
Coffs Harbour	27	10	18	4
Tamworth	42	13	28	6
Bourke	32	16	26	7
New South Wales total	23	8	19	4
Wangaratta	20	9	18	4
Ballarat	25	8	20	3
Victoria total	23	8	19	4
Rockhampton	25	14	19	7
Roma	37	16	24	7
Townsville	36	20	30	12
Cairns	48	20	35	10
Mount Isa	31	33	24	16
Torres Strait	29	28	21	14
Cooktown	40	43	31	23
Queensland total	34	23	26	13
Adelaide	42	8	29	3
Ceduna	29	19	19	7
Port Augusta	42	26	35	17
SA total	39	19	30	12
Narrogin	19	16	14	6
Geraldton	28	20	21	9
Kalgoorlie/Warburton	42	21	29	12
South Hedland	29	19	21	11
Broome	20	22	13	12
Derby	35	34	30	20
Kununurra	43	28	37	16
WA total	30	22	24	12
Darwin	31	15	33	9
Jabiru	41	47	32	28
Alice Springs/Apatula	28	36	30	21
Katherine	24	36	22	21
Tennant Creek	24	36	27	23
Nhulunbuy	58	51	43	28
NT total	34	39	32	34

Sources: Tables 6.3, 6.5 and 6.2.

The survey results place the housing need of the indigenous populations of, for example, Tamworth, Cairns, Cooktown, Adelaide, Port Augusta, Kununurra and Jabiru on a similar level, with 40 per cent or more of the households in these regions being in need of extra housing. The census analysis, however, shows a very different pattern of need between these areas, with Tamworth and Adelaide less disadvantaged than Cairns, which is again less disadvantaged than Port Augusta and Kununurra, and again than Cooktown and Jabiru. The needs of indigenous people in Katherine and Tennant Creek appear from the survey to be no higher than those of Rockhampton or Wagga Wagga, whereas the census estimates indicate that they are three to four times more likely to need extra housing.

Logic suggests that the census analysis provides a better comparison of the relative need of people in these different regions than the survey, and that the survey estimates are too much affected by different criteria applied differently in different locations to provide useful comparisons between regions of their relative housing need.

The fact that the reference group consultations gave different estimates of housing need to those obtained from the census analysis should not be a surprise. The census analysis is based on black-and-white, all-or-nothing decisions resulting from comparisons of household composition to the number of bedrooms available, while the reference groups use a variety of criteria in a variety of ways. What is encouraging in regard to the census analysis is that the results appear to reflect, quite closely in some cases, the decisions of the reference groups, particularly in those rural and remote areas where this type of normative analysis might have been expected to fail.

7. Summary of findings

The lack of housing, overcrowding and poor standard of housing of indigenous Australians are recognised as being wide-ranging problems. This monograph provides an assessment of the housing need of indigenous Australians using normative indicators derived from the 1991 Census of Population and Housing. The analyses allow identification of the degree and spatial distribution of housing need using measures which embrace two components of housing disadvantage:

i housing adequacy, assessed by the amount of overcrowding in private dwellings and the extent of other forms of inadequate housing; and
ii financial housing stress, measured by the level of after-housing poverty, a measure which compares household disposable income after housing expenditure with a benchmark based on the Henderson Poverty Line.

The results reported here provide some much-needed empirical evidence on the extent of family homelessness, overcrowding and after-housing poverty among Aboriginal and Torres Strait Islander households nationally, for States and Territories and for the 36 ATSIC regional council areas. The level of need and relative disadvantage in housing of indigenous Australians and their relationships to characteristics such as household composition, housing tenure and urban-rural location are detailed. Comparisons between indigenous and non-indigenous Australians emphasise, and quantify, the extent of disadvantage in housing experienced by Aboriginal and Torres Strait Islander people. Comparisons of the 1986 and 1991 Census data indicate that little progress has been made in the intervening period towards relieving the backlog of housing need.

Overcrowding and housing need

The criteria used here to assess overcrowding compare the bedroom requirement of the residents in the dwelling with the number of bedrooms available. The bedroom requirement of the household is determined using the following rules: a married or de facto couple require one bedroom; any other adult member of the household requires one bedroom; and dependent children share to a maximum of two per bedroom. Persons temporarily absent from the dwelling on census night are included as residents. Conversely, visitors and non-family members aged 15-24 years studying full-time are assumed to be temporary residents only and are excluded, on the assumption that they will be counted as temporarily absent elsewhere.

A summary indicator of total housing need is defined by the number of additional bedrooms required to relieve indigenous families and other adults from overcrowding. In the context of this analysis, a family consists of a parent or couple and their unmarried offspring who reside with them (an elementary family). Indigenous families are those in which one or both parents identify as being of Aboriginal or Torres Strait Islander origin. Three categories of housing need are identified:

i *Family homelessness* includes the housing need of second and third families living in overcrowded, multi-family dwellings, and all families in improvised dwellings.

ii *Family housing stress* assesses the adequacy of the current dwelling for the primary family alone, net of the needs of any other families, boarders or relatives who might share the dwelling. Housing need in this category is the number of additional bedrooms required by primary families, over and above those available in their current dwelling.

iii *Other adult housing need*, identifies the number of single indigenous adults who contribute to overcrowding as boarders, family relatives or group household members. Lone persons in improvised dwellings and persons located in hostels for the homeless, night shelters or refuges on census night are also included in this category. Each adult adds one bedroom to the housing need assessment.

National estimates of housing need

At the national level, the number of bedrooms required to adequately house the indigenous Australian population in 1991 is estimated to be 178,763 bedrooms. The dwellings housing Aboriginal and Torres Strait Islander people fail to meet this target by 35,205 bedrooms, a level of unmet need representing 20 per cent of the total requirement.

Almost one-third (31 per cent or 10,823 bedrooms) of total housing need is associated with family homelessness. Eight per cent (4,700) of indigenous Australian families are either living in an improvised dwelling (1,687 families) or sharing an overcrowded dwelling with another family (3,013 families). One-fifth are couples and need one bedroom accommodation only, half are single parents or couples with one or two dependent children, requiring two bedroom accommodation, while 30 per cent have three or more dependent children in their family and need, at least, a three bedroom dwelling.

One-third of the total housing need, 11,657 bedrooms, is associated with the housing need of adult boarders and relatives sharing family housing. These single adults contribute to overcrowding in just over half of the family dwellings in which they are present. Of the 4,264 Aboriginal and Torres Strait Islander adults boarding with families, 2,735 (64 per cent) need, theoretically, to be rehoused. Similarly, 8,922 (59 per cent) of the

15,030 single adults living with a related family contribute to overcrowding in these dwellings.

Family housing stress accounts for almost one-third (31 per cent or 10,995 bedrooms) of the total housing need of indigenous Australians. Overall, 7,523 families, 13 per cent of the national total, are inadequately housed. In most cases (70 per cent), one additional bedroom is needed to relieve their housing stress, although an additional need of two or more bedrooms for 2,250 families is a clear indication of more severe overcrowding. For 39 per cent of these families, overcrowding is exacerbated by having another family or other adults living with them.

Single indigenous adults living in group households, often shared with non-indigenous adults, are relatively unlikely to be overcrowded: only 528 of 4,969 indigenous group household members are in housing need. The remaining housing need results from 419 adults living in group or lone person improvised dwellings and 783 adults counted in hostels for the homeless, night shelters or refuges.

Housing need, urban-rural location and tenure

Housing need is significantly higher for indigenous Australians living in rural areas than for the urban population. Multi-family and extended family households are more common in rural areas, and improvised dwellings contribute substantially to the assessment of housing need, particularly to family homelessness. Families living in rural areas are also most likely, and those in major urban centres least likely, to suffer housing stress, increasing the likelihood that any relatives or friends living with them add to the level of overcrowding.

Of 4,700 homeless indigenous families nationally, 72 per cent (3,390 families) are located in rural areas, 23 per cent (1,095 families) in smaller urban centres and 5 per cent (215 families) in major urban centres. In rural areas, one in every five indigenous families is either living in an improvised dwelling (1,448 families) or sharing the overcrowded dwelling of another family (1,942 families). In urban areas, 238 families live in improvised dwellings, none of them in major urban centres. Family housing stress affects 8, 12 and 19 per cent respectively of families in major urban, other urban and rural areas, and three-quarters of adults sharing family dwellings in rural areas contribute to overcrowding, compared with 39 and 54 per cent respectively of those in major urban and other urban centres. Combining these categories of housing need shows the majority, 57 per cent of total bedroom need, in rural areas, 12 per cent in major urban centres and 31 per cent in other urban areas.

Two-thirds of all indigenous families live in rented housing, divided almost equally between government (31 per cent) and non-government housing (35 per cent). About two-fifths of dwellings in this latter category are expected to be Aboriginal community-based housing. Indigenous tenants of State and Territory housing authorities and other government agencies are less likely to be overcrowded than tenants in other rented

accommodation, with families more likely to be adequately housed and less likely to share their housing with other families, boarders or, particularly, related adults.

In the government housing sector, 3 per cent (610) of the 18,129 families are assessed as being homeless, compared with 11 per cent (2,270, including 397 families in improvised dwellings) of the 20,587 families in other types of rented housing. Family housing stress is also less common, although still significant, in government housing, affecting 12 per cent (2,089) of families compared with 18 per cent (3,687) in other rented dwellings.

Family home buyers are least likely to share with others and most likely to be adequately housed. Family homelessness affects just 1 per cent (106 families) of these families with a further 6 per cent (578 families) in housing stress. Among home owners, presumably more established in their dwellings, family homelessness affects 4 per cent of families and almost 10 per cent are in housing stress. Two-fifths of boarders and related adults sharing with home owners or home buyers contribute to overcrowding in family dwellings, compared with three-fifths of those in rental housing.

Regional variations in overcrowding and housing need

A majority of indigenous Australian families are resident in two States, New South Wales (29 per cent) and Queensland (26 per cent). Western Australia (14 per cent) and the Northern Territory (12 per cent) had most of the remaining indigenous population, with smaller populations in Victoria (7 per cent), South Australia (6 per cent), Tasmania (5 per cent) and the Australian Capital Territory (less than 1 per cent).

Indigenous people living in the Northern Territory suffer a significantly higher level of housing disadvantage than elsewhere. More than one in four (29 per cent) of the Territory's indigenous families are homeless, either living in improvised dwellings or in overcrowded multi-family households. A further 22 per cent are assessed as being in housing stress due to inadequate housing. Three-quarters of single indigenous adults in the Territory live in improvised dwellings or contribute to overcrowding in family dwellings. Overall, the Northern Territory accounts for almost one-third (32 per cent) of the national housing need of the indigenous population. One-quarter of that need is associated with families and adults living in improvised dwellings.

Western Australia, South Australia and Queensland also have high proportions of homeless families, 12, 9 and 7 per cent respectively, with relatively few homeless families elsewhere: less than 2 per cent of families in New South Wales, and a small proportion in other States. In comparison to other States, indigenous families in Queensland and Western Australia are more likely to suffer housing stress and to be sharing their dwelling with relatives or boarders. Queensland accounts for 28 per cent of the total housing need, twice that of New South Wales (14 per cent) which has a similar sized indigenous population. Western Australia accounts for 18 per

cent, one-quarter of which is associated with improvised dwellings. South Australia has 5 per cent of the total need, one-third from residents of improvised dwellings. Indigenous populations in Victoria, Tasmania and the Australian Capital Territory are least disadvantaged.

The distribution of indigenous housing need by regional council area emphasises the housing disadvantage of rural and remote regions. This increases as regions become more distant from State capital cities. Across the six regional council areas covering New South Wales and the Australian Capital Territory, housing need per head of population is least in the Sydney and Queanbeyan regions. Higher levels of family housing stress and shared housing increase housing need in Wagga Wagga and Coffs Harbour, with further increases in both categories as well as higher levels of family homelessness adding to housing need in the Tamworth and Bourke regions.

In South Australia, the majority of the indigenous population are living in the Adelaide region and account for about one-quarter of the State's housing need. Ceduna, with about one-tenth of the State's indigenous population, has one-sixth of the total housing need, while the Port Augusta region, with an indigenous population about half the size of that in the Adelaide region, accounts for two-thirds of total need.

The housing need of indigenous people in Queensland increases from the south to the north of the State, with the population in the metropolitan region of Brisbane least disadvantaged and Torres Strait and Cooktown regions suffering severe disadvantage in housing. Family homelessness affects relatively few families in Brisbane, Rockhampton and Roma, with very little improvised housing in these areas. In the five other regions, 3-4 per cent of families live in improvised dwellings. Overcrowded families in multi-family households raise the level of family homelessness to 8 per cent in Townsville and Cairns, 10 per cent in Mount Isa, 15 per cent in Torres Strait and 23 per cent in Cooktown. Family housing stress and the numbers of single adults contributing to overcrowding are also lower in the southern regions and higher in the Torres Strait, Cooktown and Mount Isa regions.

Western Australia shows a similar pattern of low housing need in the metropolitan region and increasing disadvantage as regions become more distant from Perth. Derby, Kununurra and Warburton regional council populations each account for 15 per cent of the total housing need of the State. Improvised dwellings account for almost two-thirds of the need in Warburton, about one-third in Kalgoorlie and South Hedland, and one-fifth of the need in Broome, Derby and Kununurra, with relatively little improvised housing in the other three regions.

In the Northern Territory, the indigenous populations of Darwin and, to a lesser extent, Alice Springs regional councils have a much lower level of housing disadvantage than the other regions in the Territory. In these five regions, the proportion of homeless families ranges from 28 per cent in Katherine to 46 per cent in Nhulunbuy, and a further one-quarter of

families in each area suffer housing stress in their current dwellings. Improvised dwellings are a very significant contributor to housing need in the Territory, about one-quarter of the total bedroom need in each regional council area resulting from families and adults living in this form of housing.

Nationally, the seven regional council areas with the highest housing need account for two-fifths of the national total, 13,918 of the 35,205 bedrooms required. This group includes the two largest regional council populations in northern Queensland, Townsville and Cairns, and the most disadvantaged region in that State, Cooktown, and four regional councils, roughly equal in population size, in the Northern Territory: Katherine, Apatula, Nhulunbuy and Jabiru.

Estimates of the proportion of the population in housing need in each region emphasise the severity of the housing disadvantage of indigenous people living in the northern and central areas, and the relative advantage of those living in State capital cities and south-east and eastern parts of Australia. With the exception of Darwin, Perth, Narrogin and Geraldton, all regional councils north-west of a line from Adelaide to Rockhampton require additional housing for at least one-fifth of their indigenous population. In most of the Northern Territory and in the northernmost parts of Queensland and Western Australia, housing need is more than double this level. Conversely, the regions to the south-east all have levels of housing need below the national average.

Torres Strait Islander overcrowding and housing need

Half of the national population of Torres Strait Islanders, 3,303 elementary families and 1,228 other adults, are resident in Queensland, representing about one-fifth of that State's indigenous population. The largest concentration is in Torres Strait region where the indigenous population is almost entirely Torres Strait Islander. There are also substantial Torres Strait Islander populations in Townsville, Cairns and Brisbane regions, and smaller populations in Rockhampton and Cooktown areas. Mount Isa and Roma have very small Torres Strait Islander populations. Torres Strait Islander housing need in Queensland is 2,076 bedrooms, 84 per cent of their national housing need assessment.

Over the State as a whole, the housing need of Torres Strait Islanders is in proportion to their population, 21 per cent of the total bedroom need of indigenous people in Queensland. However, more than half of this need, 1,135 bedrooms, is concentrated in Torres Strait, one of the two most disadvantaged regions in the State. In all other regions, Torres Strait Islander housing need is lower than that of the Aboriginal population. The Cooktown, Cairns and Townsville populations are each assessed as needing about 315 bedrooms, with 100 bedrooms for the Brisbane population and 57 for Rockhampton.

The Torres Strait Islander population of New South Wales, 1,322 families and 318 single adults, is concentrated in the three most populous

regions, Sydney, Coffs Harbour and Wagga Wagga. Housing need is lower among this group than among Aboriginal people, just 173 bedrooms, 3.6 per cent of the indigenous housing need for the State. Similarly, in other States and Territories, the relatively small populations of Torres Strait Islanders appear to suffer little housing disadvantage, the total need being just over 200 bedrooms.

After-housing poverty

Measures of financial housing stress are concerned with identifying those households, families or individuals for whom housing costs impose an unreasonable burden on their income. The assessment of unreasonable burden is usually defined in one of two ways: first, by the proportion of available income spent on housing being higher than some defined standard (affordability); and second, by the residual income available after meeting housing costs being insufficient to maintain a reasonable standard of living (after-housing poverty). This study uses only the after-housing poverty measure.

The methodology to determine households in after-housing poverty requires specification of an after-housing poverty line (AHPL) for each household, a benchmark of the disposable income required to support the needs of the household for other (non-housing) goods and services. The benchmarks used here, based conservatively on the after-housing costs Henderson Poverty Lines, allow $150 a week for a couple, $90 a week for a single adult and $45 a week for each dependent child. The sum of these values across household members gives an AHPL benchmark for each household.

Comparison of this benchmark with the after-tax household income available to the household allows two levels of after-housing poverty to be identified:

i households in poverty *before* housing costs have after-tax income levels below their AHPL even before housing costs have been taken into account; and

ii households in poverty *after* housing costs are those whose housing costs reduce their after-tax income below their AHPL benchmark.

The only housing costs recorded in the census are mortgage payments for home buyers and rents for tenants. Home owners are allocated zero housing costs. These are clearly minimum housing costs and the estimates of after-housing poverty are thus conservative. Households in improvised dwellings, and those where the only indigenous members are visitors, students or dependent children are excluded.

At the national level, 27 per cent of indigenous households (in non-improvised dwellings) are assessed as being in after-housing poverty, with

7 per cent in poverty before housing costs have to be taken into account. Seventy-three per cent of Aboriginal and Torres Strait Islander households with incomes of $20,000 or less, 20 per cent of those with incomes in the range $20,000-40,000 and 5 per cent of those with higher incomes are in after-housing poverty.

Almost two-fifths of indigenous households in rented government housing are in after-housing poverty, 10 per cent before paying housing costs and a further 28 per cent after rent payments are deducted. In other rented housing, where Aboriginal community based-housing may have some effect on reducing after-housing poverty levels, the corresponding proportions are 7 and 24 per cent respectively. For home owners, the estimated proportion in poverty is 8 per cent, while mortgage repayments leave 14 per cent of indigenous home buyers in after-housing poverty.

Among renters in particular, the presence of boarders, relatives or a second or third family in a family household reduces after-housing poverty levels, but also increases considerably the probability that the dwelling is overcrowded. In government housing, 42 per cent of one family households suffer after-housing poverty, compared with 28 per cent of households shared with other families or adults. The corresponding proportions among those in non-government rented housing are 35 and 27 per cent respectively.

Many indigenous adults living alone in rented housing have insufficient income to meet their housing costs without falling below the poverty level. Forty-one per cent of lone person households in rented government housing and 36 per cent of those in other rented dwellings are in after-housing poverty. Group housing would seem to be a relatively attractive alternative, both for landlords and for tenants, 17 per cent of the group households in rented dwellings being in after-housing poverty. The number of indigenous groups renting public housing is, however, relatively low compared to other tenure categories, suggesting that there may be some restrictions on group households in that sector.

Indigenous populations in New South Wales, Victoria, Queensland and South Australia have similar poverty levels, with 6-7 per cent of indigenous households in poverty before housing costs and 20-22 per cent in poverty after housing costs. Western Australia has a higher proportion, 10 per cent, in poverty before housing costs and a similar proportion to the other States, 21 per cent, in poverty after housing costs. Poverty before housing costs is highest in the Northern Territory (12 per cent) and lowest in Tasmania and the Australian Capital Territory (3 per cent), with fewer households (14, 18 and 13 per cent respectively) taken into poverty by housing costs in these areas.

Between regional councils, the broad pattern of poverty after housing costs appears, in general, to reflect the section-of-State characteristics of areas, with higher poverty levels in rural areas. The most remote regions, such as Warburton and Kununurra in Western Australia, Katherine, Tennant Creek, Jabiru and Apatula in the Northern Territory, and

Cooktown in Queensland, have large numbers of households in poverty before housing costs, reflecting the lack of income in remote communities, but housing costs have a lesser effect on poverty levels. These areas also suffer the highest level of unmet housing need and have the highest numbers of families and adults living in improvised housing.

After-housing poverty and overcrowding

Very substantial reductions in the extent of overcrowding in indigenous dwellings could be achieved with relatively little effect on after-housing poverty levels. Almost half of the total housing need assessment is associated with boarders, related adults and homeless families sharing overcrowded family dwellings. Rehousing these adults and families to relieve overcrowding would reduce an additional 1,860 of the present households to after-housing poverty, increasing the total number from 16,369 to 18,229 or from 28 to 31 per cent. On the other hand, 5,300 of almost 9,000 families now housing boarders, related adults and other families would no longer be overcrowded, and the remainder would obtain some relief from overcrowding.

The majority, 70 per cent, of homeless families, whether living in improvised dwellings or sharing overcrowded multi-family housing, have incomes below or marginally above their AHPL and a substantial proportion, about 40 per cent, have insufficient income to meet basic needs for non-housing goods and services even before any housing costs are taken into account. Lack of income also restricts the housing choice of most single adults who share overcrowded or improvised housing. One in five have annual incomes below $5,000 a year, and another two in five have incomes just in excess of the poverty line. A minority of these families and adults, 20-30 per cent, could afford to pay reasonable housing costs, and their presence in family households may provide relief from poverty for some primary families.

Shared housing then provides an avenue of relief from poverty for many indigenous families and single adults. Staying in the family home or relying on relatives or friends appear to be the only affordable housing options in many cases, with improvised housing an alternative in some areas. With incomes at these levels, any housing provided to relieve overcrowding will need to be at very low cost and, to the extent that preferences for additional income to spend on non-housing goods and services might outweigh concerns about overcrowding, these preferences also need to be considered. Without assistance to relieve their poverty and adequate income to meet other, non-housing, requirements, it is inevitable that some families will seek to lower housing costs by sharing, perpetuating the overcrowding problems that additional housing is meant to relieve.

Primary families with incomes below the poverty line are overrepresented among those with inadequate housing. One-quarter of the primary families with additional bedroom need have incomes below their

AHPL compared to one-tenth of those who are not overcrowded. Whether they are adequately housed or not, a further 20 per cent of indigenous primary families are taken into poverty by housing costs.

Government housing authorities might be expected to provide adequate housing at affordable rents, but there is cause for concern on both counts. Twelve per cent of indigenous family tenants in rented government housing are overcrowded in their dwelling, and 43 per cent are in after-housing poverty, 30 per cent because of housing costs. The widespread use of housing-costs-to-income ratios to determine minimum affordable rents in public housing, usually 20 per cent of after-tax income, takes no account of the other essential needs of families on very low incomes.

Overall, one in sixteen indigenous primary families are assessed as being both overcrowded and in after-housing poverty if living alone in their current dwelling. Just over half of these families have incomes below the poverty level. Most of these families are tenants, 30 per cent renting government housing and 55 per cent in other types of rented housing. More than two-fifths share with other adults (29 per cent) or other families (13 per cent), perhaps to obtain some relief from poverty by sharing costs. For these families, relief from overcrowding is perhaps less of a concern than relief from poverty.

A further 8 per cent of indigenous primary families are inadequately housed but not in after-housing poverty. Just over one-fifth of these families own (12 per cent) or are buying (10 per cent) their home and three-fifths are tenants, one-quarter (26 per cent) in public housing. Despite being overcrowded themselves, one-quarter of these families share with other adults and one-tenth with another family. About half of these families have residual income well in excess of after-housing poverty levels, while the majority of the adults and families they share with are either in poverty or close to it. If these primary families were relieved of their reponsibilities to others, a significant proportion could feasibly solve their own overcrowding problem, given that suitable housing were available to them.

Just over one-quarter (27 per cent) of indigenous primary families are adequately housed but in after-housing poverty, 7 per cent being in poverty before housing costs. Almost half (46 per cent) of these families are in public housing and more than one-third (36 per cent) are tenants in other rented housing, with a small number of home owners (3 per cent) and home buyers (9 per cent). Almost one-third (29 per cent) of these families share with other adults or families. The primary need of this group is for adequate income or, in most cases, more affordable rents.

The majority of indigenous primary families, 60 per cent, are neither in after-housing poverty nor are they overcrowded in their dwellings. Most of the home owners (82 per cent) and home buyers (80 per cent) are in this category, but only half of the renters, whether in public housing or another type of tenancy. Relatively fewer families (22 per cent) house boarders, related adults or other families, although almost half (45 per cent) of all shared family dwellings are in this category. These families provide

housing, and perhaps also income support, to many families and other adults who might otherwise be homeless and in poverty.

Comparison with non-indigenous housing stress

Indigenous families represent just 1.4 per cent of all families in Australia but account for 22 per cent of the 21,102 families assessed as homeless, and 38 per cent of the 4,400 families living in improvised dwellings. Indigenous family homelessness is 20 times more likely than for non-indigenous families. In addition, the proportions of indigenous families in housing stress (13 per cent) and other adults in housing need (52 per cent) are four times those of the non-indigenous population.

In contrast to the pattern for indigenous Australians, the adequacy of housing for the non-indigenous population varies little between major urban, other urban and rural areas. Family homelessness affects 0.4 per cent of the non-indigenous population in major urban areas, being lower in other urban centres (0.2 per cent) and higher in rural areas (0.6 per cent). In comparison, family homelessness affects 1.2, 4.5 and 20.3 per cent respectively of indigenous families in these areas.

Family housing stress affects 3 per cent of non-indigenous families in urban areas and 4 per cent in rural areas, while the corresponding proportions for indigenous families in housing stress are 8, 12, and 19 per cent of major urban, other urban and rural populations respectively. Similarly, the proportions of non-indigenous adults assessed as being in housing need show little variation, averaging 13 per cent nationally, while the proportions of indigenous adults in housing need are 30 per cent in major urban areas, 48 per cent in other urban areas and 72 per cent in rural areas.

Indigenous Australians living in major urban centres represent less than 1 per cent of the population and about 2 per cent of total housing need in these areas. In other urban areas, the indigenous population accounts for 37 per cent of family homelessness, 13 per cent of family housing stress, and 20 per cent of other adult housing need. In rural areas, the poorer housing conditions of the indigenous population and the greater tendency to share family housing result in 53 per cent of family homelessness, 16 per cent of family housing stress and 37 per cent of single adult housing need

The indigenous population is underrepresented among home owners and home buyers and overrepresented in rented housing, particularly government housing. In comparison to other Australians, indigenous families buying homes are the least disadvantaged, although housing need is still between two and three times that of non-indigenous home buyers. In owned housing, family homelessness is 10 times more likely, and family housing stress and adult housing need are almost four times the level experienced by non-indigenous families and adults. Similarly, in rented government housing, indigenous family homelessness is six times more likely, while family housing stress and other adult housing need are two

and a half times higher than for the non-indigenous population. In other rented housing, family homelessness and housing stress affect about 10 and 20 per cent respectively of indigenous families, compared to about 0.5 and 5 per cent of non-indigenous families, and about half of single indigenous adults are in housing need, five times the level of non-indigenous adults.

Comparisons of the proportion of the non-indigenous population in housing need between States and Territories show some variation, although inadequate housing is relatively uncommon in all areas. The Northern Territory stands out, with the highest level of family homelessness (1.2 per cent), family housing stress (4.1 per cent) and other adult housing need (19 per cent). New South Wales is also slightly above average, while South Australia, Western Australia and the Australian Capital Territory have below average levels of housing need.

In all States and Territories, the disadvantage in housing of the indigenous population relative to the non-indigenous population is clearly evident. Family homelessness among indigenous people is particularly severe in Queensland (6.9 per cent), South Australia (9.0 per cent), Western Australia (11.5 per cent) and the Northern Territory (28.7 per cent). The indigenous populations in these regions also have high levels of family housing stress, respectively five, five, seven and four times higher than for non-indigenous families. Indigenous populations in other States (and the Australian Capital Territory) are less disadvantaged in comparison, although their housing need is still between two and three times that of the non-indigenous population.

The greater housing need of the indigenous population reflects, in part, differences in household composition and family size. One-eighth (12.5 per cent) of the indigenous population in private dwellings live in multi-family households, compared with 1.6 per cent of the non-indigenous population, and 14.1 per cent of indigenous families have relatives present in the household compared to 3.8 per cent of non-indigenous families. Indigenous families are also larger, on average, than non-indigenous families. This combination of factors results in the average size of indigenous households being substantially higher than that of non-indigenous households, 4.6 persons compared with 2.6 persons.

The number of multi-family indigenous households and the overrepresentation of indigenous families in improvised dwellings are reflected in the high level of family homelessness. Similarly, the tendency for indigenous adults to live with a related family is evidenced by the number of boarders and, more particularly, related adults in housing need. The larger than average size of indigenous families increases the likelihood of primary family housing stress and that any families, boarders and related family adults who share their housing are overcrowded.

At the national level, an estimated 27 per cent of indigenous households in non-improvised private dwellings are in after-housing poverty, with 7 per cent in poverty before housing costs are taken into account. The corresponding proportions for the non-indigenous population

are 12 and 2 per cent respectively. Numerically, some 19,000 of the 69,000 indigenous households in Australia are assessed as being in after-housing poverty, compared with around 651,000 of the 5,546,000 non-indigenous households.

Within household tenure types, the proportions of households in poverty after housing costs are essentially the same in both populations. However, the level of poverty before housing costs remains consistently 2-3 times higher among the indigenous population across all tenures, the highest proportion in both populations being among those in rented government housing. This difference reflects the disparity in income levels between the two populations. Almost two-thirds of indigenous adults (63.5 per cent) reported income under $12,000 per year in the 1991 Census compared with 45 per cent of non-indigenous adults. The corresponding proportions reporting incomes under $8,000 per year are 46 and 34 per cent respectively. Indigenous adult income is also lower outside the capital cities, a pattern reflected in higher poverty levels in these areas.

The achievement of greater housing equality with other Australians, in terms at least of a more comparable level of overcrowding being attained, appears contingent on reducing the reliance of indigenous families and other adults on shared family housing, through better access to government housing or to other subsidised rental housing provided by community-based housing associations.

Indigenous housing provision also needs to take account of the relatively high birth rates among indigenous people which result in larger, younger families. Higher rates of indigenous family housing stress suggest that indigenous families are less able to adjust their dwelling size to meet the requirements of family growth. This is consistent with the low income status of many indigenous families in private rental housing, and the reliance of those in public housing on adequate housing being available. Nevertheless, it seems reasonable to expect a similar level of housing stress among indigenous and non-indigenous families in public housing, rather than the situation currently where indigenous families are more than twice as likely to be overcrowded compared to non-indigenous families.

The widespread use of housing costs to income ratios to determine affordable rents for government housing results in 28 per cent of indigenous (and non-indigenous) government housing tenants being taken into poverty after housing costs. The ATSIC Community Housing and Infrastructure Program rental guidelines endorse this approach, requiring Aboriginal and Torres Strait Islander organisations administering housing to charge rents equivalent to State housing authority rates or no less than 20 per cent of the combined income, including rental subsidy, of the main income earner and spouse, whichever is the lesser. However, most of the homeless families and single adults in housing need have incomes below or only marginally above the poverty level. Unless rental subsidies are sufficient to meet their housing costs, the additional housing which is clearly needed to relieve overcrowding will increase even further the very

high levels of financial housing stress, as measured by levels of after-housing poverty, experienced by indigenous Australian families.

Changes in overcrowding and after-housing poverty, 1986-91

The identification of changes in indigenous housing conditions and, more specifically, changes in overcrowding between the 1986 and 1991 Censuses is hampered by differences in the coverage of the indigenous population, population increase resulting from increased self-identification, and the influence of visitors on the 1986 Census household and family classifications. In consequence, only the most significant changes can be identified with reasonable certainty.

The estimated total need of 35,387 bedrooms in 1986 and 35,205 bedrooms in 1991 suggests that there has been very little change in indigenous housing need between the censuses. This comparison assumes a similar pattern of visitors in the two censuses, and a similar effect of visitors on housing need. There are, nevertheless, some changes consistent with a reduction in the level of housing need of the indigenous population. The number of indigenous households living in improvised dwellings declined from 1,903 in 1986 to 1,718 in 1991; the number of indigenous lone person households increased by an estimated 1,800 dwellings; and the number of indigenous family or group housholds increased by almost 12,000, or 23 per cent, from around 51,000 to 63,000, while the indigenous population increased by 16.6 per cent nationally.

There is clear evidence of a reduction in overcrowding in indigenous dwellings which are owned, being purchased or rented from public housing authorities, most significantly by reductions in family homelessness. The gains in the public housing sector, however, appear to have been achieved at the expense of a significant increase in overcrowding in other rented housing. Access to government housing for the indigenous population seems to have been well below the level required to meet the needs of population growth and family formation, with a consequent increase in the number of families living in other rented housing, perhaps Aboriginal community-based housing in particular. This may be the result of a shift in housing preferences, and perhaps location preferences, of indigenous people.

At the regional level, the indigenous populations of New South Wales and Western Australia appear to have benefited most from improved housing, with reduced levels of overcrowding apparent in almost all regional council areas in those States. Ballarat in Victoria, Adelaide in South Australia, Cairns in Queensland and Apatula in the Northern Territory are other regions which appear to have reduced overcrowding. A decline in housing conditions and increased levels of housing need are evident in Port Augusta in South Australia, Cooktown in Queensland, and in Darwin, Katherine, Jabiru and, less substantially, Tennant Creek in the

Northern Territory. In all other regions, the level of housing need apparently remained more or less unchanged.

The number of non-improvised indigenous dwellings increased by almost 14,000 (25 per cent) nationally between the 1986 and 1991 Censuses. This was accompanied by a small decrease of 600 (11 per cent) in the number of households with net income below their AHPL, but a larger increase of about 2,850 (27 per cent) in the number of households in poverty after housing costs. The total number of households in after-housing poverty then increased by about 2,250 from 1986 to 1991 (up 14 per cent). These figures correspond to a reduction from 10 per cent to 7 per cent in household poverty before housing costs, the proportion of households in poverty after housing costs remained steady at 19 per cent, and the total in after-housing poverty therefore declined by 2.6 per cent, from 29.3 to 26.7 per cent.

The net increase in the number of households in after-housing poverty affected only tenants, particularly non-government housing tenants. In this category, the number of households in after-housing poverty increased from 5,899 to 7,617, a rise of 29 per cent, while public housing tenants in after-housing poverty increased from 6,881 to 7,561, up 10 per cent. Expressed as a proportion of the indigenous households in each tenure, after-housing poverty declined from 15 to 8 per cent among home owners and from 17 to 14 per cent among home buyers, while remaining more or less unchanged at 37 per cent in public housing and 30 per cent in other rental housing.

Household after-housing poverty declined in New South Wales, Queensland and Tasmania, with variations of less than 1 per cent in poverty rates in other States and Territories. South Hedland, Broome and Warburton in Western Australia appeared to have substantial increases in after-housing poverty, and the Cooktown region clearly did not benefit from the general fall in poverty rates in Queensland. Other regions in the north of Western Australia and in the Northern Territory had lesser increases in after-housing poverty rates. Regions showing a decline in after-housing poverty, despite increased numbers of indigenous dwellings, were Mount Isa and Torres Strait in Queensland, and Darwin, Alice Springs and Nhulunbuy in the Northern Territory. The relatively small populations involved at the regional council level, and the changes in the census, caution against making too much of these comparisons.

Comparison with the 1992 ATSIC Housing and Community Infrastructure Needs Survey

The 1992 Housing and Community Infrastructure Survey involved consultations with reference groups representing 1,353 indigenous communities throughout Australia, excluding major urban centres and some smaller urban centres with large indigenous communities of over

1,000 indigenous persons. The occupancy of indigenous dwellings reported in the survey is generally higher than that reported in the census, and survey estimates of housing need at the State, Territory and regional council level are then substantially higher than census estimates. In New South Wales and Victoria, the indigenous dwellings surveyed appear almost four times more likely to need extra housing than the census approach indicates. The survey estimate is twice that of the census in South Australia, one and a half times higher in Queensland and Western Australia, and one-seventh lower in the Northern Territory.

The survey results place the housing need of the indigenous populations of, for example, Tamworth, Cairns, Cooktown, Adelaide, Port Augusta, Kununurra and Jabiru on a similar level, with 40 per cent or more of the households in these regions in need of extra housing. The census analysis, however, shows a very different pattern of need between these areas, with Tamworth and Adelaide less disadvantaged than Cairns, which is again less disadvantaged than Port Augusta and Kununurra, which in turn are less disadvantaged than Cooktown and Jabiru. The needs of indigenous people in Katherine and Tennant Creek appear from the survey to be no higher than those of Rockhampton or Wagga Wagga, whereas the census estimates indicate that they are between three and four times more likely to need extra housing.

The survey does not purport to be a population census, the number of people identified reflecting a perception of community size rather than the population of the centres surveyed and the different estimates of housing need obtained is not surprising. The census analysis uses strict criteria based on household composition and the number of bedrooms to define housing need, while the survey estimates reflect different criteria applied differently in a diversity of cultural situations. Nevertheless, estimates of indigenous Australians' housing need are essential to guide resource allocation and seek adequate resources to redress the severe housing disadvantage of indigenous Australians. In this context, logic, and the pattern of the results, indicate clearly that the analysis of census data provides more reliable and more credible estimates.

Concluding comments

While this analysis has been undertaken primarily to meet a critical need for detailed empirical evidence on the housing need of indigenous Australians, there are six broad conclusions which emerge as fundamental to the broad policy debate.

i The relationship between poverty and housing need is a much more pressing concern for indigenous Australians than it is for the population as a whole. Compared to the rest of the population, indigenous people are more than twice as likely to be in after-

housing poverty. This relative lack of income limits their housing choice, imposing a heavy responsibility on State and Territory housing authorities and other government housing programs to provide adequate, affordable housing appropriate to meeting the needs of Aboriginal and Torres Strait Islander people.

ii Without access to low cost housing in appropriate places, indigenous people will share their dwellings with relatives or friends, with consequent effects on the level of overcrowding. In remote locations, improvised housing provides an alternative to shared housing. While some families will want to live with an extended family, others will accept overcrowding in order to share housing and other costs or out of obligations to provide shelter to others in need. Whatever the balance is between these explanations, the fact is that 21 per cent of indigenous families and 60 per cent of the adults who share family housing are inadequately housed.

iii There are clear differences in the level of disadvantage in housing between regional populations, the broad patterns being of increasing disadvantage from regions in the south and east of Australia to those in the north and west, and from major urban centres to rural and remote areas of Australia. While indigenous people living in urban areas are clearly disadvantaged in their housing status relative to non-indigenous people, they are significantly less disadvantaged than the rural indigenous population.

iv In the 1986-91 intercensal period there was no overall reduction in the backlog of housing need of indigenous Australians, suggesting that housing provision for indigenous people has just kept pace with population growth and family formation. Access to government housing was, however, well below the level of population growth, resulting in a shift of the indigenous population into other rented housing. The extent to which this shift is explained by increased use of Aboriginal community-based housing should be investigated.

v The assertion that the census, rather than a survey, provides a more appropriate mechanism for deriving estimates of housing need has been borne out. For the first time, national and regional estimates have been produced which are comparable spatially and temporally between areas and populations, including the non-indigenous population and the 1986 census population. These results provide a baseline for the analysis of housing need over time and for consistent longitudinal assessment of housing programs affecting indigenous Australians.

vi While the analysis of census data provides a cost efficient and reliable basis for quantifying housing need, its validity as a measure of relative need should not be taken for granted. It is imperative that, given the heterogeneity of the indigenous population and the variety of circumstances in which indigenous people live, qualitative analyses of appropriate housing type and residential preferences be taken into account. The results presented in this monograph are open to debate on such issues as the significance of family homelessness and housing stress in different locations and the relative weight that should be given to them. The proof of the value of these results will be if they inform decisions that result in better housing conditions for indigenous Australians.

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The Housing Need of Indigenous Australians, 1991

This monograph presents a rigorous quantitative assessment, against normative criteria, of the housing requirements of indigenous people, and in doing so makes an important contribution to knowledge about the interrelationship between environmental health and economic status. This work provides, for the first time, national estimates of the housing need of indigenous Australians, the regional variations between States and Territories and the 36 Aboriginal and Torres Strait Islander Commission regional councils. It also provides a measure of their relative need compared to the non-indigenous population, as well as the change over time between 1986 and 1991 with intercensal analysis. It will thus be an essential document for all policymakers and program managers in the housing arena at Commonwealth, State and Territory, regional and local levels, providing a baseline from which to assess indigenous housing need and a guide to resource allocation.

The monograph was revised from the original consultancy report while the author was a Visiting Fellow at the Centre for Aboriginal Economic Policy Research, Faculty of Arts, The Australian National University, from September to December, 1994.

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